JULY 2023

CITY OF SANTA CLARITA

SHADOWBOX STUDIOS PROJECT

FINAL ENVIRONMENTAL IMPACT REPORT

SCH NO. 2022030762

PREPARED FOR

City of SANTA CLARITA

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LIST OF TABLES

LIST OF ATTACHMENTS

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This document is the Final Environmental Impact Report (Final EIR) for the Shadowbox Studios Project (Project). This document, together with the Draft EIR and its technical appendices, comprise the Final EIR. The document has been prepared by the City of Santa Clarita, acting as lead agency, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) Section 21000 *et seq.*) and the CEQA Guidelines (14 California Code of Regulations Section 15000, *et seq.*).

The Final EIR is required under CEQA Guidelines Section 15132 to include the Draft EIR, comments received on the Draft EIR, the responses of the lead agency to significant environmental issues raised by those comments in the review and consultation process, and any other relevant information added by the lead agency (including minor changes to the Draft EIR). A Mitigation Monitoring and Reporting Program (MMRP) is also required; it can be a separate document or, as in this case, included in this Final EIR.

This document provides revisions to the Draft EIR made in response to comments and/or as initiated by the lead agency. These revisions correct, clarify, and amplify the text of the Draft EIR, as appropriate, but do not alter the conclusions of the Draft EIR.

1.1 Project Summary

The Project Site is located on a 93.5-acre site in the southwestern portion of Santa Clarita, in the Newhall Community, approximately 2 miles east of Interstate 5 (I-5), 2 miles west of the Antelope Valley Freeway (State Route 14 [SR-14]), and 2 miles south of the Santa Clara River. The Project Site is situated at the northeastern corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; a railroad right-of-way (ROW) and Railroad Avenue on the west; Metropolitan Water District (MWD) ROW on the east; and slopes maintained by the adjacent residential uses to the north.

The Project Applicant, L.A. Railroad 93, LLC, proposes to develop a full-service film and television studio campus on the Project Site that would consist of approximately 475,500 square feet of sound stages; approximately 565,400 square feet of workshops, warehouses, and support uses; approximately 209,300 square feet of production and administrative offices; and approximately 35,600 square feet of catering and other specialty services. Upon completion, the campus would have an overall building area of approximately 1,285,800 square feet.

Eight buildings, which would contain 19 sound stages, would be constructed in the central portion of the Project Site, south of Placerita Creek. A three-story office building and a four-story (five-level), 1,072-space parking structure that includes one subterranean level are proposed in the southwestern corner of the Project Site. In addition, a two-story support building would extend along the remaining portion of the western boundary (i.e., Railroad Avenue) of the Project Site, south of Placerita Creek. Other ancillary and specialty use buildings, including three catering buildings and a mechanical building with a substation, would be located to the east and southeast of the proposed main entrance at the intersection of Arch Street and 13th Street.

The Project would be conditioned to construct a Class I multi-purpose path along the Project frontage on 12th, Arch, and 13th Streets and either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to provide a link for pedestrians and bicyclists between the Project Site and the Jan Heidt Newhall Metrolink Station, which is located approximately 2,500 feet south of the Project Site, and Old Town Newhall dining and

entertainment district. The Class I multi-purpose path would be a completely separate right-of-way for the exclusive use of bicyclists and pedestrians with the path visibly marked.

The Project would be required to comply with the California Building Standards Code (CCR Title 24), as well as the California Green Building Standards (CALGreen) Code (CCR Title 24, Part 11), as adopted by the Santa Clarita Municipal Code, which requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects, as well as high-efficiency plumbing fixtures. Furthermore, the 2022 Building Energy Efficiency Standards (CCR Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the California Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance. In addition, the Project would provide parking spaces with EV charging stations and parking spaces that would be EV-ready pursuant to the requirements of the CALGreen Code. Furthermore, subject to City and other agency approvals, rooftop photovoltaic (PV) systems and solar panels would be installed on all the sound stage buildings and the support building for localized use.

The Project would require the following discretionary actions from the City: (1) certification of the Final EIR; (2) approval of the following permits: a Conditional Use Permit (CUP) for all new development within the Planned Development Overlay and for studio use within the MXN zone, a Minor Use Permit (MUP) for the provision of less than the minimum residential density required in the MXN zone, a Tentative Map (TM) to subdivide the Project Site into five lots, and Oak Tree Permit (OTP) for the encroachment into the protected zone and removal of oak trees; and a Ridgeline Alteration Permit for proposed development activity within 100 feet vertically and/or horizontally from a designated significant ridgeline as identified in the Land Use Element of the General Plan; (3) approval of a Zone Change to modify the boundaries of the Jobs Creation Overlay Zone (JCOZ) to incorporate the portion of the Project Site zoned MXN, south of Placerita Creek, and to change the zoning of the northern portion of the site from NU5 to MXN; and (4) approval of a General Plan Amendment to modify the General Plan Land Use Designation from NU5 to MXN to remain consistent with the proposed Zone Change and to make text changes to the discussion regarding the North Newhall Area, as discussed in the Land Use Element of the General Plan, to address allowable development potential and building height in the area.

1.2 Public Review Process

The City prepared the Draft EIR to inform decisionmakers and the public of the potential significant environmental effects associated with the Project. The Draft EIR was circulated for public review and comment for 45 days, from April 6, 2023, through May 22, 2023. A Public Notice of Availability (NOA) of the Draft EIR was mailed to all organizations and individuals previously requesting notice and was published in The Signal on April 6, 2023. The City also submitted the complete Draft EIR with appendices to the State Clearinghouse and filed the NOA with the Los Angeles County Clerk for posting during the Draft EIR comment period. In addition, the City presented the Project at three City of Santa Clarita Planning Commission meetings on April 18, 2023, May 16, 2023, and June 20, 202, to solicit comments from the public and the Planning Commission on the Draft EIR. The presentation provided an overview of the CEQA process, description of the Project, and identified environmental impacts, required mitigation measures, and alternatives to the Project that were evaluated in the Draft EIR. Public comments were received regarding the Project at both Planning Commission meetings. The Draft EIR and Final EIR, and associated appendices were made available for review online at: https://www.santa-clarita.com/city-hall/departments/

community-development/planning-division/environmental-impact-reports-under-review/shadowbox-studios-project and a limited number of hard copies of the Draft EIR were available at the City Clerk's Office at Santa Clarita City Hall and the City of Santa Clarita Old Town Newhall Library. The video presentations for the three Planning Commission meetings are also available online at the following:

- April 18, 2023: http://santaclaritacityca.iqm2.com/Citizens/SplitView.aspx?Mode=Video&MeetingID=2791&Format=Agenda
- May 16, 2023: http://santaclaritacityca.iqm2.com/Citizens/SplitView.aspx?Mode=Video&MeetingID=2793& Format=Agenda
- June 20, 2023: http://santaclaritacityca.iqm2.com/Citizens/SplitView.aspx?Mode=Video&MeetingID=2795&Format=Agenda

Interested persons and organizations had the opportunity to submit their written comments on the Draft EIR during the 45-day public review period. Comment letters received on the Draft EIR, reproduced in their entirety, and responses to those comments are provided in this Final EIR.

CEQA Guidelines Section 15088(c) specifies that the focus of the responses to comments must be on the disposition of significant environmental issues. Responses are not required for comments regarding the merits of the Project or on issues not related to potential physical environmental impacts and/or the Draft EIR's analysis of such impacts. Comments on the merits of the Project or other comments that do not raise environmental issues are nevertheless included in the record for consideration as part of the Project's approval process. The responses address environmental issues and indicate where issues raised do not pertain to environmental impacts or analysis. In the latter instance, no further response is provided.

Only minor changes to the text of the Draft EIR occurred since public circulation, and none of the changes constitute "significant new information," which would require its recirculation. "Significant new information" is defined in CEQA Guidelines Section 15088.5(a) as follows:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

None of these circumstances have arisen from comments on the Draft EIR; therefore, recirculation is not required.

1.3 Review and Recommended Certification of the Final EIR

As required by PRC Section 21092.5 and CEQA Guidelines Section 15088(b), at least 10 days before consideration of the Final EIR for certification by the City of Santa Clarita City Council, the City provided written responses (hard or electronic copy) to each public agency that submitted written comments on the Draft EIR. In addition, responses are also being distributed to all commenters who provided an address. The Final EIR is available for public review at the following locations:

- City of Santa Clarita, Office of the City Clerk, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California, 91355
- City of Santa Clarita Old Town Newhall Library, 24500 Main Street, Santa Clarita, CA 91321
- City's website: https://www.santa-clarita.com/city-hall/departments/community-development/planning-division/environmental-impact-reports-under-review/shadowbox-studios-project

1.4 Organization of the Final EIR

This Final EIR is organized into four sections as follows:

Introduction. This section (above) provides introductory information about the Project and the CEQA review process.

Comments on the Draft EIR and Responses. This section presents all comments received by the City during the 45-day public review period for the Draft EIR (April 6, 2023, through May 22, 2023), as well as responses to those comments.

Errata and Clarifications to the Draft EIR. This section consists of minor revisions and clarifications to the Draft EIR in response to comments received.

Mitigation Monitoring and Reporting Program. This section provides the full MMRP for the Project. The MMRP lists the mitigation measures by environmental topic and identifies the method of review verification, responsible agency, and timing for each measure.

This section provides a list of commenters and copies of the comments received with responses to those comments.

2.1 List of Commenters

Table 2.1-1, List of Commenters on the Draft EIR, assigns a number to identify the commenter and notes the general topic area covered by each comment letter.

Table 2-1
List of Commenters on the Draft EIR

Letter No.	Individual/Signatory	Affiliation	Date	Comment Topics
PUBLIC AGENCIES				
State				
A1	Erinn Wilson-Olgin, Environmental Program Manager I South Coast Region	California Department of Fish and Wildlife	5/22/2023	Biological Resources
Regional				
A2	Paul Hubler, Chief Strategy Officer	Southern California Regional Rail Authority/ Metrolink	5/22/2023	Railroad Right-of-Way
A3	Sam Wang, Program Supervisor, CEQA IGR Planning, Rule Development & Implementation	South Coast Air Quality Management District	5/19/2023	Air Quality and Health Risk
County				
A4	Ronald M. Durbin, Chief Forestry Division Prevention Services Bureau	Los Angeles County Fire Department	5/12/2023	Fire Department Services and Wildfire
A5	Tracey Jue, Director Facilities Planning Bureau	Los Angeles Sheriff's Department	5/18/2023	Sheriff's Department Services and Safety Protection
A6	Mandy Huffman, Environmental Planner Facilities Planning Department	Los Angeles County Sanitation Districts	5/22/2023	Wastewater Collection and Treatment Facilities
A7	Shine Ling, AICP, Senior Manager Development Review Team Transit Oriented Communities	Los Angeles Count Metropolitan Transportation Authority	5/22/2023	Railroad Right-of-Way, Transportation, and Transit
Local				
A8	Rick Vasilopulos	Santa Clarita Valley Water Agency	5/1/2023	Groundwater Supply

Table 2-1
List of Commenters on the Draft EIR

Letter No.	Individual/Signatory	Affiliation	Date	Comment Topics
ORGANIZATIONS				
O1	Jason A. Cohen Mitchell M Tsai Attorney At Law	Southwest Mountain States Regional Council of Carpenters	4/17/2023	Use of Local Workforce and Air Pollutant and Greenhouse Gas Emissions (GHG) Reduction
O2	Richard Franco Adams Broadwell Joseph & Cardozo	Coalition for Responsible Equitable Economic Development in Los Angeles	5/12/2023	Draft EIR Review Extension and Document Request
O3	Sandra Cattell, Chair	Sierra Club, Santa Clarita Valley Group	5/15/2023	Zone Change, Flooding/ Hydrology, Traffic/Air Pollution, and Public Safety
O4	Richard Drury Lozeau Drury LLP	Supporters Alliance for Environmental Responsibility	5/18/2023	Inadequacy of the Draft EIR
O5	Jason A. Cohen Mitchell M Tsai Attorney At Law	Southwest Mountain States Regional Council of Carpenters	5/19/2023	Use of Local Workforce, Air Pollutant and GHG Emissions Reduction, and Inadequacy of the Draft EIR
O6	Richard Franco	Coalition for Responsible Equitable Economic Development in Los Angeles	5/12/2023	Document Request, Inadequacy of the Draft EIR, Biological Resources, Air Quality and Human Health, Noise, Transportation, GHG Emission, Land Use, Geology, Energy, Public Services, and Wildfire
O7	James M. Danza, MS, AICP, Chair	Friends of the Santa Clara River	5?22/2023	Draft EIR Review Extension, Hydrology, Groundwater Recharge, and Water Supply
O8	Thomas D. Green Adamski Moroski Madden Cumberland & Green LLP	Placerita Canyon Property Owners Association	5/22/2023	Draft EIR Review Extension, Document Request, Transportation, Evacuation, Aesthetics, Land Use, Population and Housing, Wildfire, and Alternatives

Table 2-1
List of Commenters on the Draft EIR

Letter No.	Individual/Signatory	Affiliation	Date	Comment Topics
O9	Lynne Plambeck, President	Santa Clarita Organization for Planning and the Environment	5/22/2023	Draft EIR Review Extension, Inadequacy of the Draft EIR, General Plan and Beautification Master Plan Inconsistency, Traffic, GHG and Climate Change, Light and Glare, Biological Resources, Noise,
MEMBERS OF THE PUBLIC				
P1	Greg Hargrove	Public	4/24/2023	Evacuation and Wildfire
P2	John Fossa	Public	5/22/2023	Land Use, Traffic and Safety, Ingress and Egress, Emergency and Evacuation, and Alternative
P3	M. Teresa Todd	Public	5/22/2023	Alternative, Ingress and Egress, Transportation Infrastructure, Rail Safety, Emergency Response and Evacuation, Land Use,
P4	Cynthia Harris	Public	5/23/2023	Oak Tree

2.2 Comments and Responses to Comments

This subsection includes copies of the comment letters received on the Draft EIR, as identified in Subsection 2.1, List of Commenters, with the comments numbered for reference and responses to the comments.

Attachment 1 also includes the letters that requested an extension of the Draft EIR public review period, express support for or opposition to the Project, or provide suggestions and opinions on the merits of the Project or components of the Project. As these letters do not address the adequacy of the Draft EIR, no responses were provided. However, these letters have been included in the records and forwarded to the decision-makers for consideration.

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LETTER A1

STATE OF CALIFORNIA • NATURAL RESOURCES AGENCY Gavin Newson, Governor
DEPARTMENT OF FISH AND WILDLIFE Charlton H. Bonham, Director

South Coast Region
3883 Ruffin Road | San Diego, CA 92123
wildlife.ca.gov

May 22, 2023

Erika Iverson
City of Santa Clarita Planning Division
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
EIverson@santa-clarita.com

Subject: Shadowbox Studios Project, Draft Environmental Impact Report, SCH #2022030762, City of Santa Clarita Planning Division, Los Angeles County

Dear Ms. Iverson:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) from the City of Santa Clarita Planning Division (City) for the Shadowbox Studios Project (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources. **A1-1**

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may **A1-2**

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LETTER A1 Continued

need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 *et seq.*), CDFW recommends the Project Applicant obtain appropriate authorization under the Fish and Game Code.

A1-2 Continued

Project Description and Summary

Objective: The Project proposes to develop a full-service film and television studio campus on a 93.5-acre site and would consist of sound stages, workshops, warehouses, offices, and catering services. Upon completion, the campus would have an overall building area of approximately 1,285,800 square feet. The Project would involve the construction of 19 sound stages, a large support building, a parking structure, an office building, a catering building, and a mechanical building south of Placerita Creek.

Landscaping

The Project proposes to landscape approximately 13 percent of the Project site throughout the studio campus. The construction of the studio buildings and surrounding landscaping will include the removal of 13 of the 16 oak trees present on site. The Project would replace the removed trees with 450 trees of different non-oak varieties, and 211 oak trees throughout the campus.

A1-3

The Project would also install a plant nursery along the entire length of the parking lot along the eastern boundary of the Project site to provide plants for use on the sound stages and as visual screening from the neighborhood. The Project would also include a small private park in the center of a courtyard, picnic areas, outdoor break areas, and a small dog park throughout the campus.

Access and Parking

A main parking structure would be installed in the southwestern corner of the Project site, with supplemental parking throughout the entire campus. An additional employee parking lot is proposed on the north side of Placerita Creek, which would be connected to the main campus by an all-weather bridge. The current design of this all-weather bridge will necessitate the

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installation of piers within the streambed, as well as additional bank stabilization features. These stabilization features may include buried revetments, retaining walls, weirs, and other structures within Placerita Creek. The Project would also construct a clearly marked multi-purpose path along 12th, Arch, and 13th Street for the exclusive use of bicyclists and pedestrians.

Off-Site Improvements

The Project proposes additional off-site improvements including the widening of 13th Street Arch Street, and 12th Street; the installation of public hydrants; improvements to the railroad crossing at 13th Street; and the implementation of storm drain improvements to accommodate surface water runoff from Dockweiler Drive. These improvements also include the installation of a pedestrian and bike bridge from the Jan Heidt Newhall Metrolink Station on Railroad Avenue to the future extension of Dockweiler Drive across Newhall Creek.

A1-3
Continued

Location: The Shadowbox Studios Project would be located in the southwestern portion of the City of Santa Clarita in the Newhall Community in Los Angeles County. The Project site is located at the northeastern corner of Railroad Avenue and 13th Street, bounded by 12th Street, Arch Street, and 13th Street on the south, a railroad right-of-way and Railroad Avenue on the west, Metropolitan Water District right-of-way on the east, and slopes maintained by the adjacent residential area to the north.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately avoiding and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

A1-4

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Specific Comments

Comment #1: Impacts on Crotch's Bumble Bee (*Bombus crotchii*)

Issue: The Project may impact suitable habitat for Crotch's bumble bee (*Bombus crotchii*), a candidate CESA-listed species. The DEIR does not discuss or provide mitigation measures to reduce the impact to Crotch's bumble bee.

Specific impacts: The Project may result in the temporal and permanent loss of suitable nesting and foraging habitat of Crotch's bumble bee. Construction and ground-disturbing activities may cause death or injury of adults, eggs, and larvae; burrow collage; nest abandonment; and reduced nest success.

Why impacts would occur: A review of iNaturalist (iNaturalist 2023), shows over one hundred observations of Crotch's bumble bee throughout Los Angeles County. Furthermore, the Project site has a variety of habitats that have potential to provide foraging and overwintering sites for this candidate species. Crotch's bumble bee primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include, soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Ground disturbance and vegetation removal from the Project during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas within and adjacent to the Project site. In addition to potential habitat loss, human disturbance, heavy machinery, and construction activities may result in direct Crotch's bumble bee. The DEIR does not discuss the species or the Project's impact on Crotch's bumble bee. Additionally, the DEIR does not provide species-specific avoidance and minimization measures. Without avoidance, minimization, or mitigation measures, Project activities will result in significant impacts to Crotch's bumble bee.

A1-5

Evidence impact would be significant: The California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. The Project may substantially reduce and adversely modify habitat as well as reduce and potentially impair the viability of populations of Crotch's bumble bee. In addition, Crotch's bumble bee has a State ranking of S1/S2. This means

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that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Lastly, Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority (CDFW 2017). The Project's impact on Crotch bumble bee has yet to be mitigated. Accordingly, the Project continues to have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: The DEIR should provide full disclosure of the presence of Crotch's bumble bee within the Project site. The DEIR should analyze the Project's impact on floral resources, nesting habitat, and overwintering habitat for Crotch's bumble bee. Conclusions made in regard to habitat quality and suitability should be substantiated by scientific and factual data, which may include maps, diagrams, and similar relevant information sufficient to permit full assessment of significant impacts by reviewing agencies. Potential direct and indirect impacts on Crotch's should be discussed in the DEIR. If the Project would impact Crotch's bumble bee and its associated habitat, the DEIR should provide measures to avoid and/or mitigate potential impacts to Crotch's bumble bee and habitat supporting the species.

A1-5
Continued

Mitigation Measure #1: If the Project site has suitable foraging or nesting habitat for Crotch's bumble bee, the City should retain a qualified entomologist with the appropriate take authorization to conduct surveys to determine presence/absence. Surveys should be conducted within one year prior to vegetation removal and/or grading throughout the entire Project site by a qualified entomologist familiar with the species' behavior and life history. A minimum of three surveys should also be conducted during peak flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). The qualified entomologist should utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation (CBBA 2023). During the surveys, the entomologist should flag inactive small mammal burrows and other potential nest sites to reduce the risk of take. Survey results, including negative findings, should be submitted to CDFW prior to obtaining appropriate permits. At minimum, a survey report should provide the following:

a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the

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map show surveyor(s) track lines to document that the entire site was covered during field surveys.

b) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals; and species searched.
c) Map(s) showing the location of nests/colonies.
d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

Mitigation Measure #2: If Crotch's bumble bee is detected, the qualified entomologist should identify the location of all nests within and adjacent to the Project site. A 15-meter no disturbance buffer zone should be established around any identified nest(s) to reduce the risk of disturbance or accidental take. A qualified entomologist should expand the buffer zone as necessary to prevent disturbance or take.

Mitigation Measure #3: If Crotch's bumble bee is detected and impacts to Crotch's bumble bee cannot be feasibly avoided, the City should consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an ITP. It is important that the take proposed to be authorized by CDFW's ITP be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the

A1-5
Continued

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Project's CEQA document may not necessarily satisfy mitigation required to obtain an ITP.

Mitigation Measure #4: Any floral resource associated with Crotch's bumble bee that will be removed or damaged by the Project should be replaced at no less than 1:1. Floral resources should be replaced as close to their original location as is feasible. If active Crotch's bumble bee nests have been identified and floral resources cannot be replaced within 200 meters of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources should be maintained in perpetuity and should be replanted and managed as needed to ensure the habitat is preserved.

A1-5
Continued

Comment #2: Impacts on Mountain Lion (*Puma concolor*)

Issue: The Project may impact suitable habitat for mountain lion (*Puma concolor*), a candidate CESA-listed species. The DEIR does not discuss or provide mitigation measures to reduce the impact to mountain lion.

Specific impacts: The Project as proposed may impact mountain lion by grading and developing at least 93.5 acres of habitat. The Project may also impact mountain lion by restricting movement corridors, and increasing human presence and associated traffic, noise, and lighting.

Why impacts would occur: The Project is located within the range of the Southern California/Central Coast Evolutionary Significant Unit of mountain lion. As stated in the Biological Resources Assessment prepared for the DEIR, "Placerita Creek may provide movement pathways for mobile species such as mule deer and coyote."

A1-6

Habitat loss and fragmentation due to roads and development has driven the southern California mountain lion population towards extinction (Yap *et al*. 2019). Loss of wildlife connectivity is another the primary driver for the potential demise of the southern California mountain lion population (Yap *et al*. 2019). The SGSB mountain lion population likely has high risk of inbreeding depression and extinction given its low genetic diversity, low effective population size, and patterns of isolation due to roads and development creating movement barriers (Center for Biological Diversity 2019). Conserving and restoring habitat connectivity and corridors is essential for mitigating impacts to mountain lions.

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This is especially critical in the face of climate change-driven habitat loss and increased frequency of fires (Yap *et al*. 2019).

Increased frequency of wildfires is also a threat to the survival of the Southern California/Central Coast ESU of mountain lion (Center for Biological Diversity 2019). Increased human activities next to open spaces with natural vegetation increase the likelihood that fires may start and spread to the adjacent Quigley Canyon Open Space. Fire could also result in injury or mortality of mountain lions (Center for Biological Diversity 2019). For instance, After the Woolsey Fire, the body of mountain lion P-64 was found dead with severely burned paws (Center for Biological Diversity 2019).

The DEIR does not discuss the species or the Project's impact on mountain lion. Additionally, the DEIR does not provide species-specific avoidance and minimization measures. Without avoidance, minimization, or mitigation measures, Project activities will result in significant impacts to mountain lion.

Evidence impact would be significant: The mountain lion is a specially protected mammal in the State (Fish and G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an evolutionarily significant unit of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a). As a CESA candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9).

A1-6
Continued

As to CEQA, the status of mountain lion as a threatened species under CESA qualifies it as an endangered, rare, or threatened species under CEQA (CEQA Guidelines, §15380). No mitigation has been proposed for impacts on mountain lion from the Project from the standpoint of habitat loss and encroachment, as well as anthropogenic impacts discussed above.

Accordingly, the Project could have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species by CDFW. In addition, the Project has a substantial adverse effect on the movement of resident or migratory wildlife species, resident or migratory wildlife corridors, or wildlife nursery sites.

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Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #2: The City should revise the Project's CEQA document in order to provide additional analyses and information on the Project's impact and cumulative effects on mountain lion. The City should discuss the Project's potential impact on mountain lion from the standpoint of the following impacts:

1. Introducing new/additional barriers to dispersal;
2. Constraining wildlife corridors and pinch points leading to severed migration;
3. Provide an analysis of current landscape intactness (current level of development) around the Project site, and how the Project may impact habitat connectivity or impede mountain lion movement across the landscape to remaining adjacent habitats.
4. Use of herbicides, pesticides, and rodenticides.

A1-6 Continued

A cumulative impact analysis should evaluate potential impacts on mountain lion including: the introduction of new/additional barriers to dispersal; constraint of wildlife corridors and pinch points leading to severed migration; habitat loss, fragmentation, and encroachment; and increased human-wildlife interactions.

Mitigation Measure #5: If take or adverse impacts to mountain lion cannot be avoided, the City should consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 *et seq*.). The City should comply with the mitigation measures detailed in the take authorization issued by CDFW. The City should provide a copy of a fully executed take authorization prior to the City issuing the Project grading permits and related building permits.

Mitigation Measure #6: The City should prohibit use of any rodenticides and second-generation anticoagulant rodenticides on the property in perpetuity. The City should provide documentation and a plan that rodenticides and second-generation anticoagulant rodenticides will be prohibited.

Comment #3: Impacts on Coastal California Gnatcatcher (*Polioptila californica californica*)

A1-7

Issue: The Project may impact coastal California gnatcatcher (*Polioptila californica californica*), an Endangered Species Act (ESA)-listed species and a California Species of Special Concern (SSC).

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Specific impacts: The Project could result in temporary or permanent impacts to coastal California gnatcatcher through alteration or loss of suitable nesting and foraging habitat. Project activities occurring during the breeding and nesting season could also result in the incidental loss of fertile eggs or nestlings.

Why impacts would occur: Coastal California gnatcatcher have potential to occur at the Project site. The DEIR offered protocol presence/absence surveys; however, the document did not offer mitigation for habitat that may be lost or altered due to the construction of the proposed Project. Habitat loss and fragmentation are key factors in population loss and species extinction in a multitude of species (Vandergast 2019).

Nesting sites for coastal California gnatcatcher are often found within sagebrush, buckwheat, or other scrub species located on gentle slopes or drainages (USFWS 1997). The Project site contains approximately 17.5 acres of appropriate coastal sage scrub vegetation which could be impacted by Project activities. Direct and indirect impacts may occur as a result of ground disturbance; vegetation clearing; use of construction equipment and vehicles; increased foot traffic; and introduction of invasive plant species. Species within the potentially impacted natural community include black sage (*Salvia mellifera*), California buckwheat (*Erigonum fasciculatum*), California sagebrush (*Artemisia californica*), big sagebrush (*Artemisia tridentata*), and ashy-leaved buckwheat (*Eriogonum cinereum)*. These plant species and natural communities are vital for the persistence of coastal California gnatcatcher within Los Angeles County. Moreover, the risk of local extirpation is heightened following major habitat disturbances such as fires and drought. Both disturbance events have increased in frequency and severity in southern California.

A1-7
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Evidence impact would be significant: The Project could result in impacts on coastal California gnatcatcher. As an ESA-listed species, gnatcatcher is considered an endangered, rare, or threatened species under CEQA (CEQA Guidelines, § 15380). An SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;

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- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2022b).

CEQA provides protection not only for ESA and CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Take of coastal California gnatcatcher could require a mandatory finding of significance (CEQA Guidelines, § 15065). Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

Thus, the Project may still have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW and USFWS.

A1-7
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Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #8: CDFW recommends the continued survey for coastal California gnatcatcher to determine presence/absence within or adjacent to suitable or designated critical habitat in the Project site. The City should retain a qualified biologist with an appropriate USFWS permit to survey the Project site. The qualified biologist should conduct surveys according to USFWS Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines (USFWS 1997). The survey protocol requires a minimum of six surveys to be conducted at least one week apart from March 15 through June 30 and a minimum of nine surveys at least two weeks apart from July 1 through March 14. The protocol should be followed for all surveys unless otherwise authorized by the USFWS in writing. CDFW recommends gnatcatcher surveys be conducted and USFWS notified (per protocol guidance) prior to issuance of a grading permit.

Mitigation Measure #9: If coastal California gnatcatcher is present, the City should consult with the USFWS to determine if the Project would result in take of coastal California gnatcatcher. Consultation with the USFWS, in order to comply

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with the ESA, is advised well in advance of any ground-disturbing activities and/or vegetation removal that may impact gnatcatcher.

If a take permit from the USFWS is needed, the City should comply with the mitigation measures detailed in a take permit issued from USFWS.

A1-7 Continued

Comment #3: Impacts on Streams and Associated Natural Communities

Issue: The Project may have a significant impact on streams and associated natural communities.

Specific impacts: The Project would result in permanent and/or temporal loss of streams and associated natural communities. Ground-disturbing activities resulting in erosion and earth movement that could impair streams, whether ephemeral, intermittent, or perennial. The Project may require streams to be channelized or diverted from their natural course of flow. The Project may require vegetation along streams to be removed or may degrade vegetation along streams through habitat modification (e.g., loss of water source, encroachment, and edge effects leading to introduction of non-native plants).

Why impacts would occur: According to pages 4.3-6 through 4.3-22 in the DEIR, the Project would impact Placerita Creek and two unnamed ephemeral drainages (western and eastern). A total of 12.08 acres of streambed and associated riparian habitat occur on the Project site. Approximately 4.4 acres of Placerita Creek would be impacted from the proposed Project activities and a combined total of 2.26 acres of permanent impacts to the unnamed ephemeral drainages.

A1-8

The DEIR provides Mitigation Measure MM-BIO-5 that would require the City to propose compensatory mitigation for temporary and permanent impacts to land subject to the jurisdiction of CDFW at a minimum ratio of 1:1. However, the Project's impact on streams and associated natural communities has yet to be mitigated below a level of significance. First, the Project does not recommend the avoidance of impacts to any streams or propose a setback distance from the streams present on site. In Mitigation Measure MM-BIO-1, the proposed avoidance only pertains to the standard Best Management Practices (BMPs) to prevent hazardous substance leakages into wetlands. It is unclear if and how the Project would be configured to avoid streams and associated natural communities. Second, the construction of a bridge with piers within the streambed, and the installation of undescribed streambank stabilization measures are not sufficiently analyzed in order to fully understand whether these

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LETTER A1 Continued

activities may be considered a substantial impact on streams and associated natural communities. Within Section 4.9 (Hydrology and Water Quality) of the DEIR, there is no discussion specifically addressing how the potential bridge design and bank stabilization measures may permanently alter the existing drainage pattern of Placerita Creek. The introduction of these impervious surfaces to the existing hydrological processes may result in increased scour and deposition of sediment downstream. Additionally, the DEIR did not provide a jurisdictional delineation or impacts analysis for the modifications proposed to the Dockweiler Drive Extension Project, which includes the installation of a pedestrian and bike bridge from the Jan Heidt Newhall Metrolink Station on Railroad Avenue to the future extension of Dockweiler Drive. Lastly, MM-BIO-5 proposes compensatory mitigation at 1:1, which may be insufficient for significant impacts on a regionally diminishing resource that provides significant and essential habitat and migration corridors for wildlife. In addition, 1:1 may be insufficient for impacts on a Sensitive Natural Community adjacent to a stream. A higher ratio may be necessary to compensate for the rarity of the vegetation community, local significance of wetland features, and the uncertainties when creating or restoring vegetation communities and their complex abiotic interactions.

A1-8
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Evidence impacts would be significant: The Project may impact streams and associated natural communities. CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 *et seq*. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake[1];
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or
- Deposit or dispose of material into any river, stream, or lake.

CDFW requires an LSA Agreement when a Project activity may substantially adversely affect fish and wildlife resources.

For reasons discussed above, the Project continues to have a substantial

[1] "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a water body.

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LETTER A1 Continued

adverse effect on state or federally protected wetland (e.g., marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means.

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #5: CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the lead agency/project applicant for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, a Project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of an LSA Agreement. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation; enhancement or restoration; and/or protection and management of mitigation lands in perpetuity.

A1-8
Continued

CDFW recommends the City incorporate the following recommended mitigation measures into Mitigation Measure MM-BIO-5:

Mitigation Measure #11: The City should notify CDFW pursuant to Fish and Game Code section 1602 for construction and activities occurring near or impacting streams and associated natural communities. The City should notify CDFW prior to any ground-disturbing activities and vegetation removal, including staging, near streams. The notification to CDFW should provide the following information:

1) A stream delineation in accordance with the U.S. Fish and Wildlife Service wetland definition adopted by CDFW[2] (Cowardin et al. 1979);
2) Linear feet and/or acreage of streams and associated natural communities that would be permanently and/or temporarily impacted by the Project. This includes impacts as a result of routine maintenance and fuel modification. Plant community names should be provided based on vegetation association and/or alliance per the Manual of California Vegetation;

[2] Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.

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3) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation should be discussed; and
4) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation should assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under pre-Project and post-Project conditions.

A1-8 Continued

Mitigation Measure #12: If the Project would impact streams and associated natural communities, the City should obtain an LSA Agreement prior to any ground-disturbing activities and vegetation removal, including staging, near streams.

Mitigation Measure #13: The City should provide compensatory mitigation at no less than 3:1 for impacts to streams and associated natural communities, or at a ratio acceptable to CDFW per an LSA Agreement.

Comment #4 Impacts on California Species of Special Concern

Issue: The Project may impact species of special concern (SSC).

Specific impacts: Project construction and activities, directly or through habitat modification, may result in direct injury or mortality (trampling, crushing), reduced reproductive capacity, population declines, or local extirpation of an SSC. Loss of foraging, breeding, or nursery habitat for an SSC may also occur as a result of the Project. Moreover, the installation of a bridge structure streambank stabilization of Placerita Creek may diminish on-site and downstream water quality. Increased sediment loads due to these activities may alter hydrologic and geomorphic processes.

A1-9

Why impacts would occur: According to page 5-2 of the DEIR, the Project area has the potential to support SSC, which includes the following species: yellow warbler (*Setophaga petechia*), burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), loggerhead shrike (*Lanius ludovicianus*), coastal whiptail (*Aspidoscelis tigris stejnegeri*); southern California legless lizard (*Anniella stebbinsi*); coast horned lizard (*Phrynosoma blainvillii*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

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The Project would require ground disturbance and vegetation removal, likely using heavy equipment. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. Preconstruction clearance surveys were proposed within the DEIR. However, this measure only minimizes impacts from crushing and burial to species directly within the work area. Likewise, preconstruction clearance surveys may not be done to a level of detail necessary to locate SSC. SSC could be injured or killed due to lack of focus surveys. Impacts on reptiles of SSC are more likely to occur because these are cryptic species that are less mobile during certain times of the day and seek refuge and hide under structures. Further, the DEIR did not provide any mitigation measures to reduce levels of noise, human activity, dust, or ground vibrations to less than significant for SSC in the surrounding area.

Evidence impacts would be significant: A California SSC is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is ESA-listed, but not CESA-listed; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2022b).

A1-9
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CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated, through appropriate disclosure of the proposed mitigation measures, below a level of significance.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #14: Species Surveys – The City should retain a qualified biologist(s) with experience surveying for each of the following species: coastal

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California gnatcatcher, coastal whiptail, southern California legless lizard, burrowing owl, and coast horned lizard. The qualified biologist(s) should conduct species-specific and season-appropriate surveys where suitable habitat occurs in the Project site. Positive detections of SSC and suitable habitat at the detection location should be mapped. These locations would help to develop more species-specific and location-specific mitigation measures. If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected.

Burrowing Owl. Surveys for burrowing owl should follow the guidelines outlined in the Staff Report on Burrowing Owl Mitigation (CDFW 2012).

Coastal California gnatcatcher. Surveys for coastal California gnatcatcher should follow the Coastal California Gnatcatcher Presence/Absence Survey Guidelines (USFWS 1997).

California legless lizard, coast horned lizard, and coastal whiptail. CDFW recommends the City conduct focus surveys for California legless lizard, coast horned lizard, and coastal whiptail. Surveys should typically be scheduled during the summer months (June and July) when these animals are most likely to be encountered. To achieve 100 percent visual coverage, CDFW recommends surveys be conducted with parallel transects at approximately 20 feet apart and walked on site in appropriate habitat suitable for each species. Suitable habitat consists of areas of sandy, loose, and moist soils, typically under the sparse vegetation of scrub, chaparral, and within the duff of oak woodlands.

A1-9
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Mitigation Measure #15: Relocation and Avoidance Plan – The City should retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan should describe all SSC that could occur within the Project site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the Project site. The qualified biologist should submit a copy of a Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the Project site.

Mitigation Measure #16: Worker Awareness Training – The City, in consultation with a qualified biologist, should prepare a worker environmental awareness training. The qualified biologist should communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so.

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Mitigation Measure #17: Biological Monitor – To avoid direct injury and mortality of SSC, the City should have a qualified biologist on site to move out of harm's way wildlife of low mobility that would be injured or killed. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist should advise workers to proceed with caution. A qualified biologist should be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project phase until the cessation of all ground and habitat disturbing activities, as well as vegetation removal, to ensure that no wildlife is harmed.

Mitigation Measure #18: Scientific Collecting Permit – The City should retain a qualified biologist with appropriate handling permits, or should obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003).

A1-9
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Effective October 1, 2018, a Scientific Collecting Permit is required to monitor Project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2022d). Pursuant to the California Code of Regulations, title 14, section 650, the qualified biologist must obtain or have appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. An LSA Agreement may provide similar take or possession of species as described in the conditions of the agreement (see Comment #4: Impacts on Streams and Associated Natural Communities).

Mitigation Measure #19: Injured or Dead Wildlife – If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. A formal report should be sent to CDFW within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the

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carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

Additional Recommendations

Recommendation #6: CDFW recommends the City revise Mitigation Measure MM-BIO-3 for nesting birds in order to mitigate the Project's impact on nesting birds and raptors below a level of significance. CDFW recommends the City incorporate the following underlined language:

> "Construction activities should occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than three days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird preconstruction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot ~~100-foot~~ buffer (500 feet for raptors)~~, where feasible~~. If the Proposed Project is phased or construction activities stop for more than one week, a subsequent preconstruction nesting bird survey shall be required prior to each phase of construction.
>
> Preconstruction nesting bird surveys shall be conducted during the time of day when birds are active (typically early morning or late afternoon) and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to the property owner/developer for review and approval prior to ground and/or vegetation disturbance activities.
>
> If nests are found, their locations shall be flagged. An appropriate avoidance buffer for passerines is generally 300 feet and ~~100 feet and up to~~ 500 feet for raptors~~; however, the buffer distance may be modified by a qualified biologist depending upon the species and the proposed work activity~~. The avoidance buffer shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable material that is clearly visible to construction personnel and heavy equipment operators. Active nests shall be monitored periodically by a qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the

A1-9
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breeding/nesting is completed, and all the young have fledged. If no nesting birds are observed during preconstruction surveys, no further actions would be necessary."

Recommendation #7: CDFW recommends the City to provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the off-site improvements associated with the modifications to the Dockweiler Drive Extension Project. Emphasis should be placed upon identifying endangered, threatened, sensitive, regionally, and locally unique species, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. The DEIR should include the following information:

a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DPEIR should require individual projects to include measures to fully avoid and otherwise protect sensitive natural communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a State-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level (CDFW 2023);

A1-9
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b) A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018);

c) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at future project areas and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should also be used to inform this mapping and assessment. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

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d) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by individual projects facilitated under the Project;

e) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & Game Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in the use of future project areas should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species specific survey procedures should be developed in consultation with CDFW and the USFWS; and

f) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the individual projects may warrant periodic updated surveys for certain sensitive taxa, particularly if buildout could occur over a protracted time frame, or in phases.

A1-9
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Recommendation #8: CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (e.g., CNDDB), which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDB by completing and submitting CNDDB Field Survey Forms (CDFW 2022e). Information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Relevé Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2022f).

Recommendation #9: CDFW recommends the City revise update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist the City in developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), enforceable through permit conditions, agreements, or other

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legally-binding instruments [CEQA Guidelines, § 15126.4(a)(2)], and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

A1-9
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Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

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Conclusion

We appreciate the opportunity to comment on the Project to assist the City in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Nicole Leatherman, Environmental Scientist, at (858) 761-8020 or by email at Nicole.Leatherman@wildlife.ca.gov.

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Sincerely,

DocuSigned by:
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Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

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LETTER A1 Continued

ec: CDFW
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Ruby Kwan-Davis, Seal Beach – Ruby.Kwan-Davis@wildlife.ca.gov
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Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov

OPR
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STATE OF CALIFORNIA • NATURAL RESOURCES AGENCY Gavin Newson, Governor
DEPARTMENT OF FISH AND WILDLIFE Charlton H. Bonham, Director

South Coast Region
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wildlife.ca.gov

Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into the Project's environmental document.

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
REC-1-Impacts on Crotch's Bumble Bee	The DEIR should provide full disclosure of the presence of Crotch's bumble bee within the Project site. The DEIR should analyze the Project's impact on floral resources, nesting habitat, and overwintering habitat for Crotch's bumble bee. Conclusions made in regard to habitat quality and suitability should be substantiated by scientific and factual data, which may include maps, diagrams, and similar relevant information sufficient to permit full assessment of significant impacts by reviewing agencies. Potential direct and indirect impacts on Crotch's should be discussed in the DEIR. If the Project would impact Crotch's bumble bee and its associated habitat, the DEIR should provide measures to avoid and/or mitigate potential impacts to Crotch's bumble bee and habitat supporting the species.	Prior to finalizing CEQA document	The City
REC-2-Impacts on Mountain Lion	The City should revise the Project's CEQA document in order to provide additional analyses and information on the Project's impact and cumulative effects on mountain lion. The City should discuss the Project's	Prior to finalizing CEQA document	The City

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	potential impact on mountain lion from the standpoint of the following impacts: 2. Introducing new/additional barriers to dispersal; 3. Constraining wildlife corridors and pinch points leading to severed migration; 5. Habitat loss, fragmentation, and encroachment; 6. Discuss the number or acreage of landscape linkages/landscape blocks within the Project area and adjacent areas. CDFW recommends referencing CDFW's Natural Landscape Blocks dataset (DS 621). 7. Discuss the acreage of mountain lion habitat suitability (a proxy for mountain lion permeability and use) within the Project area and adjacent areas. CDFW recommends referencing CDFW's Mountain Lion Habitat Suitability dataset (DS 2916) and Mountain Lion Predicted Habitat CWHW dataset (DS 2616). 8. Provide an analysis of current landscape intactness (current level of development) around the Project site, and how the Project may impact habitat connectivity or impede mountain lion movement across the landscape to remaining adjacent habitats. 9. Increased human presence, noise, and lighting; 10. Increased fire risk; and, 11. Use of herbicides, pesticides, and rodenticides. A cumulative impact analysis should evaluate potential impacts on mountain lion from multiple spatial scales		

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	that should include the City of Santa Clarita, San Gabriel Mountains, range of the Central Coast South mountain lion population, and the range of the Southern California/Central Coast Evolutionarily Significant Unit of mountain lion. Impacts should include introducing new/additional barriers to dispersal; constraining wildlife corridors and pinch points leading to severed migration; habitat loss, fragmentation, and encroachment; and increasing human-wildlife interactions and impacts. Direct and indirect effects of a project shall be clearly identified and described, giving due consideration to both the sort-term and long-term effects. "The discussion should include […] physical changes, alteration to the ecological systems, and changes induced in population distribution, population concentration, and the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes […]" [CEQA Guidelines, § 15126.2(a)]. Also, an EIR "shall discuss cumulative impacts of a project." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" [CEQA Guidelines, §§ 15064(h)(1), 15130].		
REC-3-Mountain Lion Mitigation	The Project's CEQA document should provide mitigation for mountain lion and justify how proposed mitigation would reduce the Project's impact on mountain lion to less than significant. CDFW	Prior to finalizing CEQA document	The City

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	recommends the City recirculate the Project's CEQA document for more meaningful public review and assessment of the City's impact analysis and mitigation measures for mountain lion.		
REC-4-Issuance of Incidental Take Permit	Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an Incidental Take Permit for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an Incidental Take Permit. It is important that the take proposed to be authorized by CDFW's Incidental Take Permit be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an Incidental Take Permit. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an Incidental Take Permit.	Prior to finalizing CEQA document	The City
REC-5-CEQA document and CDFW's issuance of an LSA agreement	CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the lead agency/Project applicant for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et	Prior to finalizing CEQA document	The City

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	seq. and/or under CEQA, a Project's CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of an LSA Agreement. To compensate for any on- and off-site impacts to aquatic and riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures; avoidance of resources; protective measures for downstream resources; on- and/or off-site habitat creation; enhancement or restoration; and/or protection and management of mitigation lands in perpetuity.		
REC-6-Impacts to Nesting Birds	CDFW recommends the City revise Mitigation Measure MM-BIO-3 for nesting birds per the language in the comment letter.	Prior to finalizing CEQA document	The City
REC-7-Baseline Biological Assessment and Impact Analysis	CDFW recommends the City to provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the off-site improvements associated with the modifications to the Dockweiler Drive Extension Project. Emphasis shall be placed upon identifying endangered, threatened, sensitive, regionally, and locally unique species, and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. The DEIR should include the following information:	Prior to finalizing CEQA document	The City

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	a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DPEIR should require individual projects to include measures to fully avoid and otherwise protect sensitive natural communities from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity. CDFW considers these communities as threatened habitats having both regional and local significance. Plant communities, alliances, and associations with a State-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level (CDFW 2023); b) A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018); c) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at future project areas and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should also be used		

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	to inform this mapping and assessment. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions; d) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by individual projects facilitated under the Project; e) A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species (Fish & Game Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in the use of future project areas should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species specific survey procedures should be developed in consultation with CDFW and the USFWS; and		

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	f) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the individual projects may warrant periodic updated surveys for certain sensitive taxa, particularly if buildout could occur over a protracted time frame, or in phases.		
REC-8- Submitting Data to CNDDB	CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (e.g., CNDDB) which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Information on special status species should be submitted to the CNDDB by completing and submitting CNDDB Field Survey Forms (CDFW 2022e). Information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Relevé Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2022f).	Prior to finalizing CEQA document	The City
REC-9- Mitigation and Monitoring Reporting Program	CDFW recommends the City revise update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist the City in developing mitigation measures that are specific, detailed (i.e.,	Prior to finalizing CEQA document	The City

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	responsible party, timing, specific actions, location), enforceable through permit conditions, agreements, or other legally-binding instruments [CEQA Guidelines, § 15126.4(a)(2)], and clear for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).		
MM-1-Impacts on Crotch's Bumble Bee – Surveys	If the Project site has suitable foraging or nesting habitat for Crotch's bumble bee, the City should retain a qualified entomologist with the appropriate take authorization to conduct surveys to determine presence/absence. Surveys should be conducted within one year prior to vegetation removal and/or grading throughout the entire Project site by a qualified entomologist familiar with the species' behavior and life history. A minimum of three surveys should also be conducted during peak flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). The qualified entomologist should utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation (CBBA 2023). During the surveys, the entomologist should flag inactive small	Prior to any ground-disturbing activities and vegetation removal	The City

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	mammal burrows and other potential nest sites to reduce the risk of take. Survey results, including negative findings, should be submitted to CDFW prior to obtaining appropriate permits. At minimum, a survey report should provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys. b) Field survey conditions that should include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals; and species searched. c) Map(s) showing the location of nests/colonies. d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).		
MM-2-Impacts on Crotch's	If Crotch's bumble bee is detected, the qualified entomologist should identify the location of all nests within and adjacent to the Project site. A 15-meter no	Prior to any and during ground-	The City

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Bumble Bee – Entomologist	disturbance buffer zone should be established around any identified nest(s) to reduce the risk of disturbance or accidental take. A qualified entomologist should expand the buffer zone as necessary to prevent disturbance or take.	disturbing activities and vegetation removal	
MM-3-Impacts on Crotch's Bumble Bee – Take authorization	If Crotch's bumble bee is detected and impacts to Crotch's bumble bee cannot be feasibly avoided, the City should consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 et seq). Appropriate authorization from CDFW under CESA may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an ITP. It is important that the take proposed to be authorized by CDFW's ITP be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project's impact on a	Prior to any ground-disturbing activities and vegetation removal	The City

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	CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an ITP.		
MM-4- Impacts on Crotch's Bumble Bee – Replacement Resources	Any floral resource associated with Crotch's bumble bee that will be removed or damaged by the Project should be replaced at no less than 1:1. Floral resources should be replaced as close to their original location as is feasible. If active Crotch's bumble bee nests have been identified and floral resources cannot be replaced within 200 meters of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources should be maintained in perpetuity and should be replanted and managed as needed to ensure the habitat is preserved.	Prior to any ground-disturbing activities and vegetation removal	The City
MM-5- Incidental Take Permit for Mountain Lion	If take or adverse impacts to mountain lion cannot be avoided, the City should consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & Game Code, § 2080 *et seq.*). The City should comply with the mitigation measures detailed in the take authorization issued by CDFW. The City should provide a copy of a fully executed take authorization prior to the City issuing the Project grading permits and related building permits.	Prior to the issuance of grading permits.	The City

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MM-6-Prohibit Use of Rodenticides	The City should prohibit use of any rodenticides and second-generation anticoagulant rodenticides on the property in perpetuity. The City should provide documentation and a plan that rodenticides and second-generation anticoagulant rodenticides will be prohibited.	Prior to the issuance of grading permits.	The City
MM-7-Trash Receptacles	The City should place all community trash receptacles in areas that would not create an unnatural food source that may attract nuisance wildlife and to minimize waste and pollution in natural areas and open space.		The City
MM-5-Impacts on CAGN – Protocol Surveys	CDFW recommends the continued survey for coastal California gnatcatcher to determine presence/absence within or adjacent to suitable or designated critical habitat in the Project site. The City should retain a qualified biologist with an appropriate USFWS permit to survey the Project site. The qualified biologist should conduct surveys according to USFWS Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines (USFWS 1997). The survey protocol requires a minimum of six surveys to be conducted at least one week apart from March 15 through June 30 and a minimum of nine surveys at least two weeks apart from July 1 through March 14. The protocol should be followed for all surveys unless otherwise authorized by the USFWS in writing. CDFW recommends gnatcatcher surveys be conducted and USFWS notified (per protocol guidance) prior to issuance of a grading permit.	Prior to any ground-disturbing activities and vegetation removal	The City

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MM-6-Impacts on CAGN – Take Permit	If coastal California gnatcatcher is present, the City should consult with the USFWS to determine if the Project would result in take of coastal California gnatcatcher. Consultation with the USFWS, in order to comply with the ESA, is advised well in advance of any ground-disturbing activities and/or vegetation removal that may impact gnatcatcher. If a take permit from the USFWS is needed, the City should comply with the mitigation measures detailed in a take permit issued from USFWS.	Prior to any ground-disturbing activities and vegetation removal	The City
MM-7-Impacts on CAGN – Replacement Habitat	If the Project would result in permanent loss of habitat, the City should provide replacement habitat at no less than 2:1 for the total acreage of habitat that is impacted. Replacement habitat should be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed by the City prior to any ground-disturbing activities or vegetation removal.	Prior to any ground-disturbing activities and vegetation removal	The City
MM-8-Lake and Streambed Alteration	The City should notify CDFW pursuant to Fish and Game Code section 1602 for construction and activities occurring near or impacting streams and associated natural communities. The City should notify CDFW prior	Prior to any ground-disturbing activities	The City

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Notification – Streambeds	to any ground-disturbing activities and vegetation removal, including staging, near streams. The notification to CDFW should provide the following information: 1) A stream delineation in accordance with the U.S. Fish and Wildlife Service wetland definition adopted by CDFW[3] (Cowardin et al. 1979); 2) Linear feet and/or acreage of streams and associated natural communities that would be permanently and/or temporarily impacted by the Project. This includes impacts as a result of routine maintenance and fuel modification. Plant community names should be provided based on vegetation association and/or alliance per the Manual of California Vegetation; 3) A discussion as to whether impacts on streams within the Project site would impact those streams immediately outside of the Project site where there is hydrologic connectivity. Potential impacts such as changes to drainage pattern, runoff, and sedimentation should be discussed; and, 4) A hydrological evaluation of the 100-year storm event to provide information on how water and sediment is conveyed through the Project site. Additionally, the hydrological evaluation should assess a sufficient range of storm events (e.g., 100, 50, 25, 10, 5, and 2-year frequency storm events) to evaluate water and sediment transport under	and vegetation removal	

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[3] Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.

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	pre-Project and post-Project conditions.		
MM-9-Lake and Streambed Alteration Agreement - Streambeds	If the Project would impact streams and associated natural communities, the City should obtain an LSA Agreement prior to any ground-disturbing activities and vegetation removal, including staging, near streams.	Prior to any ground-disturbing activities and vegetation removal	The City
MM-10-Compensatory Mitigation – Streambeds	The City should provide compensatory mitigation at no less than 3:1 for impacts to streams and associated natural communities, or at a ratio acceptable to CDFW per an LSA Agreement.	Prior to any ground-disturbing activities and vegetation removal	The City
MM-11-SSC Surveys	The City should retain a qualified biologist(s) with experience surveying for each of the following species: coastal California gnatcatcher, coastal whiptail, southern California legless lizard, burrowing owl, and San Diego black-tailed jackrabbit. The qualified biologist(s) should conduct species-specific and season appropriate surveys where suitable habitat occurs in the Project site. Positive detections of SSC and suitable habitat at the detection location should be mapped. These locations would help to develop more species-specific and location-specific mitigation measures. If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected.	Prior to any ground-disturbing activities and vegetation removal	The City

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	Burrowing Owl. Surveys for burrowing owl should follow the guidelines outlined in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Coastal California gnatcatcher. Surveys for coastal California gnatcatcher should follow the Coastal California Gnatcatcher Presence/Absence Survey Guidelines (USFWS 1997). California legless lizard and coastal whiptail. CDFW recommends the City conduct focus surveys for California legless lizard and coastal whiptail. Surveys should typically be scheduled during the summer months (June and July) when these animals are most likely to be encountered. To achieve 100 percent visual coverage, CDFW recommends surveys be conducted with parallel transects at approximately 20 feet apart and walked on site in appropriate habitat suitable for each species. Suitable habitat consists of areas of sandy, loose, and moist soils, typically under the sparse vegetation of scrub, chaparral, and within the duff of oak woodlands.		
MM-12-Relocation and Avoidance Plan	The City should retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan should describe all SSC that could occur within the Project site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the Project site. The qualified	Prior to any ground-disturbing activities and vegetation removal	The City

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	biologist should submit a copy of a Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the Project site.		
MM-13-WEAP	The City, in consultation with a qualified biologist, should prepare a worker environmental awareness training. The qualified biologist should communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so	Prior to any ground-disturbing activities and vegetation removal	The City
MM-14-Biological Monitor	To avoid direct injury and mortality of SSC, the City should have a qualified biologist on site to move out of harm's way wildlife of low mobility that would be injured or killed. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist should advise workers to proceed with caution. A qualified biologist should be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project phase until the cessation of all ground and habitat disturbing activities, as well as vegetation removal, to ensure that no wildlife is harmed.	During ground-disturbing activities and vegetation removal	The City

A1-12
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MM-15-Scientific Collecting Permit	The City should retain a qualified biologist with appropriate handling permits, or should obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor Project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2022d). Pursuant to the California Code of Regulations, title 14, section 650, the qualified biologist must obtain or have appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. An LSA Agreement may provide similar take or possession of species as described in the conditions of the agreement (see Comment #4: Impacts on Streams and Associated Natural Communities).	Prior to any ground-disturbing activities and vegetation removal	The City
MM-16-Injured or Dead Wildlife	If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should	During ground-disturbing	The City

A1-12
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	be notified, and dead or injured wildlife documented immediately. A formal report should be sent to CDFW within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.	activities and vegetation removal	

A1-12
Continued

Letter No. A1
Erinn Wilson-Olgin, Environmental Program Manager I
South Coast Region
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123

Response to Comment No. A1-1

This introductory comment acknowledges receipt of the Draft EIR for the Project and introduces specific comments from the California Department of Fish and Wildlife (CDFW). The comment also identifies the statutory responsibilities of CDFW as California's Trustee Agency for fish and wildlife resources under CEQA. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A1-2

The comment identifies the statutory responsibilities of CDFW as a Responsible Agency under CEQA. In addition, CDFW recommends that the Project applicant obtain appropriate authorization under the California Fish and Game Code. As noted on page 2.0-25 of the Draft EIR, a Streambed Alteration Agreement from the CDFW is anticipated to be necessary for the Project. However, as described on pages 4.3-17 and 4.3-18 of the Draft EIR, a "take" permit pursuant to the California Endangered Species Act is not anticipated to be required since no threatened or endangered species are expected to exist on-site. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A1-3

The comment summarizes the Project Description but does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A1-4

The comment is an introductory statement to specific comments on the analysis of biological resources presented in the Draft EIR. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A1-5

The comment states the Project may impact suitable habitat and floral resources for Crotch's bumble bee (*Bombus crotchii*), a candidate species for listing under the California Endangered Species Act and states that the Draft EIR does not provide mitigation measures to reduce the potential impact to Crotch's bumble bee.

The candidacy status of Crotch's bumble bee was reinstated by the California Fish and Game Commission on September 30, 2022. The literature review for the Biological Resources Assessment report was conducted on January 18, 2022, when Crotch's bumble bee was not a candidate to be considered a special status species. The Notice of Preparation (NOP) for the Draft EIR was published on March 29, 2022, and the baseline conditions for biological resources were established at that time (per CEQA Guidelines Section 15125). While the majority of the Project Site is disturbed or vegetated with non-native grasslands with few floral resources, the

City acknowledges that upland scrub habitats within the Project Site might arguably provide potentially suitable nesting and foraging habitat for Crotch's bumble bee. Accordingly, the Draft EIR was revised to discuss the potential for the species to occur, evaluate potential project impacts, and provide species-specific avoidance and minimization measures in accordance with the comment's recommendation. Specifically, Mitigation Measure MM-BIO-6 requiring presence/ absence surveys conducted by a qualified biologist was added. If Crotch's bumble bee is detected and cannot be feasibly avoided, the Applicant is required to seek an Incidental Take Permit from CDFW. Mitigation Measures MM-BIO-7, MM-BIO-8, and MM-BIO-9 would require the application for such take authorization, establishment of a buffer zone around any active nest, and replacement of any floral resource associated with Crotch's bumble bee that is removed or damaged. If Crotch's bumblebee is present within the Project Site, implementation of Mitigation Measures MM-BIO-7 through MM-BIO-9 would reduce potential impacts to the species to a less-than-significant level.

The following revisions were made to Section 4.3, Biological Resources of the Draft EIR:

- The following was added after the first paragraph on page 4.3-5 (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Crotch's bumble bee (*Bombus crotchii*) (a candidate CESA-listed species) inhabits open grassland or scrub habitats from coastal California east to the Sierra-Cascade crest and south into Mexico. The species nests primarily in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, underbrush piles, in old bird nests, and in dead trees or hollow logs.[2] Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil, or under leaf litter or other debris.[3] Ten CNDDB records of Crotch's bumble bee are documented within the regional vicinity of the Project Site including five records between 2017-2020, the closest of which is approximately 2.5 miles to the southwest. While the majority of the Project Site is disturbed or vegetated with non-native grasslands with few floral resources, upland scrub communities within the Project Site provide suitable overwintering and foraging habitat for the species, and the species has a potential to occur.

  [2] Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla, Bumble Bees of North America: An Identification Guide, 2014, p. 208; Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee, A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species, 2018.

  [3] Goulson, D., Bumblebees: Behavior, Ecology, and Conservation, 2010, p. 317.

- The following was added after the third paragraph on page 4.3-18 (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  If Crotch's bumble bee is present during Project construction, ground disturbance and vegetation removal from the Project Site during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas within and adjacent to the Project Site. In addition to potential habitat loss, human disturbance, heavy machinery, and construction activities could potentially result in direct mortality to Crotch's bumble bee adults, eggs, or larvae. These impacts would be potentially significant.

- The following was added after the last paragraph on page 4.3-19 (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

MM-BIO-6: The Permittee must retain a qualified biologist with the appropriate take authorization (if such authorizations are available to biologist at the time of survey) to conduct surveys to determine presence/absence. A survey must be conducted at least one year before the City issues a grading permit. The survey must review the entire Project Site by a qualified biologist familiar with the species' behavior and life history. A minimum of three surveys must also be conducted during peak flying season when the species is most likely to be detected above ground, between March 1 to September 1.[11] The qualified biologist must utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation.[12] During the surveys, the biologist must identify inactive small mammal burrows and other potential nest sites with visible flags to reduce the risk of take. Survey results, including negative findings, must be submitted to CDFW applying for appropriate permits. At a minimum, a survey report provide the following:

a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. The map must show surveyor(s) track lines to document that the entire site was covered during field surveys.

b) Field survey conditions that include name(s) of qualified biologist(s) and brief qualifications, date and time of survey, survey duration, general weather conditions, survey goals, and species searched.

c) Map(s) showing the location of nests/colonies.

d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony, if any, is found. A sufficient description of biological conditions, primarily impacted habitat, must include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

[11] Robbin W. Thorp, Donald S. Horning Jr., and Lorry L. Dunning, Bumble Bees and Cuckoo Bumble Bees of California, Bulletin of the California Insect Survey 23, 1983.

[12] California Bumble Bee Atlas, Photography Tips and Bee Processing Workflow, https://www.cabumblebeeatlas.org/photography-tips.html, accessed June 7, 2023.

MM-BIO-7: If Crotch's bumble bees are detected, the qualified biologist must identify the location of any nests within and adjacent to the Project Site. A 15-meter no disturbance buffer zone must be established

around any identified active nest(s) to reduce the risk of disturbance or accidental take. A qualified biologist may expand the buffer zone as necessary to prevent disturbance or take.

MM-BIO-8: If Crotch's bumble bee is detected and impacts to Crotch's bumble bee cannot be feasibly avoided, the Permittee must consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to California Fish and Game Code Section 2080, *et seq*). Appropriate authorization from CDFW under the California Endangered Species Act (CESA) may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options (California Fish and Game Code Sections 2080.1, 2081). Early consultation is encouraged, as significant modification to the Project and mitigation techniques may be required to obtain an ITP. The California Fish and Game Code may require that CDFW issue a separate CEQA document before issuing an ITP for the Project unless the Project's CEQA document addresses all Project impacts on CESA endangered, threatened, and/or candidate species.

MM-BIO-9: Any floral resource associated with Crotch's bumble bee that will be removed or damaged by the Project must be replaced at not less than 1:1. Floral resources must be replaced as close to their original location as feasible. If active Crotch's bumble bee nests are identified and floral resources cannot be replaced within 200 meters of their original location, floral resources must be planted in the most centrally available location relative to identified nests. This location should be not more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources must be maintained in perpetuity and be replanted and managed as needed to ensure the habitat is preserved.

- The first paragraph on page 4.3-20 was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Implementation of **Mitigation Measures MM-BIO-1** through **MM-BIO-3** and **MM-BIO-6** through **MM-BIO-9** would reduce the potential to impact candidate, sensitive, or special-status species, including Crotch's bumble bee, southern California rufous-crowned sparrow, Cooper's hawk, and yellow warbler, as well as other native birds protected under the MBTA and CFGC, to a less-than-significant level.

Response to Comment No. A1-6

The comment states the Project may impact suitable habitat for mountain lion (*Puma concolor*), a candidate species for listing under the CESA, by development of habitat, restricting wildlife movement corridors, and increasing human presence and associated traffic, noise, and lighting.

The comment also indicates that the Draft EIR does not provide mitigation measures to reduce the potential impact to mountain lion.

The Draft EIR was revised to discuss the potential for the species to occur and evaluate potential Project and cumulative impacts. The Project Site is within the range of the Southern California/Central Coast Evolutionary Significant Unit of mountain lion, and scrub vegetation communities within the Project Site provide moderately suitable foraging habitat for the species.[1] However, the likelihood for mountain lion to be present within the Project Site is low due to a variety of factors: the Project Site is not within a natural landscape block; the nearest blocks are within the Santa Susana Mountains southwest of I-5 and the San Gabriel Mountains east of SR-14.[2] The CDFW mountain lion habitat suitability dataset predicts relatively low probability of use within the Project Site, similar to the urban center of Santa Clarita.[3] The Project Site is bounded to the southwest and southeast by commercial development, and to the east by residential development. While Placerita Creek may provide local movement pathways for mobile species, such as mule deer and coyote, on a broader landscape scale, Placerita Creek and its surrounding open spaces (including Quigley Canyon Open Space) are cut off from suitable mountain lion habitat linkages and corridors by SR-14, approximately 2 miles to the east. A review of iNaturalist shows that mountain lions or their sign (e.g., scat, tracks) were not documented within the Santa Clarita Valley in the area bounded by I-5, SR-14, and the Santa Clara River. Newhall Creek, situated downstream of the Project Site, is heavily constrained on both sides by intensive residential and commercial development. Accordingly, the potential for mountain lion occurrence is low, and Placerita Creek is not likely to function as regional movement pathway for mountain lions, which require extensive home ranges. Due to the extensive development surrounding the Project Site discussed above, human presence from the surrounding land uses is already at a high level, and development of the Project would not represent a significant change in this condition. Additionally, the Project would maintain Placerita Creek as a natural bottom drainage course and, thus, would not introduce new barriers within Placerita Creek that would impede mountain lion movement or dispersal, or constrain wildlife corridors and pinch points leading to severed migration. Accordingly, the Project would not result in adverse impacts to mountain lion, and take permitting would not be necessary. The Project would comply with all applicable herbicide and rodenticide regulations. As a result, additional mitigation measures prohibiting rodenticide use on the property in perpetuity are not necessary to reduce Project impacts to a less-than-significant level.

The following revisions were made to Section 4.3, Biological Resources, of the Draft EIR:

- The following was added after the second paragraph on page 4.3-6 (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Mountain Lion

  The Project Site is within the range of the Southern California/Central Coast Evolutionary Significant Unit of mountain lion (*Puma concolor*) (a candidate CESA-

[1] CDFW, Mountain Lion Predicted Habitat – CWHR M165 [ds 2616], https://map.dfg.ca.gov/metadata/ds2616.html, accessed June 2023.

[2] CDFW, Natural Landscape Blocks – California Essential Habitat Connectivity (CEHC) [ds621], https://map.dfg.ca.gov/metadata/ds0621.html?5.66.18, accessed June 2023.

[3] CDFW Mountain Lion Habitat Suitability – Summer – CDFW [ds2916], https://map.dfg.ca.gov/metadata/ds2916.html, accessed June 2023.

listed species), and scrub vegetation communities within the Project Site provide moderately suitable foraging habitat for the species.[4] However, the likelihood for mountain lion to be present within the Project Site is low due to a variety of factors: the Project Site is not within a natural landscape block; the nearest blocks are within the Santa Susana Mountains southwest of Highway 5 and the San Gabriel Mountains east of the Antelope Valley (S.R. 14) Freeway.[5] The CDFW mountain lion habitat suitability dataset predicts relatively low probability of use within the Project Site, similar to the urban center of Santa Clarita.[6] The Project Site is bounded to the southwest and southeast by commercial development, and to the east by residential development. While Placerita Creek may provide local movement pathways for mobile species such as mule deer and coyote, on a broader landscape scale Placerita Creek and its surrounding open spaces (including Quigley Canyon Open Space) are cut off from suitable mountain lion habitat linkages and corridors by S.R. 14 approximately 2 miles to the east. A review of iNaturalist shows that mountain lions or their sign (e.g., scat, tracks) were not documented within the Santa Clarita Valley in the area bounded by Highway 5, S.R. 14, and the Santa Clara River. Newhall Creek, situated downstream of the Project Site, is heavily constrained on both sides by intensive residential and commercial development. Accordingly, the potential for mountain lion occurrence is low and Placerita Creek is not likely to function as regional movement pathway for mountain lions, which require extensive home ranges. Due to the extensive development surrounding the Project Site discussed above, human presence due to surrounding land uses is already at a high level and development of the Project would not represent a significant change in this condition. Additionally, the Project would maintain Placerita Creek as a natural bottom drainage course and, thus, would not introduce new barriers within Placerita Creek that would impede mountain lion movement or dispersal, or constrain wildlife corridors and pinch points leading to severed migration. Accordingly, the Project would not result in adverse impacts to mountain lion.

[4] CDFW, Mountain Lion Predicted Habitat – CWHR M165 [ds 2616], https://map.dfg.ca.gov/metadata/ds2616.html, accessed June 2023.

[5] CDFW, Natural Landscape Blocks – California Essential Habitat Connectivity (CEHC) [ds621], https://map.dfg.ca.gov/metadata/ds0621.html?5.66.18, accessed June 2023.

[5] CDFW Mountain Lion Habitat Suitability – Summer – CDFW [ds2916], https://map.dfg.ca.gov/metadata/ds2916.html, accessed June 2023.

Response to Comment No. A1-7

The comment states that the Project could result in temporary or permanent impacts to coastal California gnatcatcher through alteration or loss of suitable nesting or foraging habitat, and that Project activities occurring during the breeding and nesting season could also result in the incidental loss of fertile eggs or nestlings. The comment recommends additional protocol-level presence/absence surveys be conducted prior to issuance of a grading permit.

Protocol surveys were completed by a qualified biologist with over 20 years of experience and an active U.S. Fish and Wildlife Service (USFWS) permit in compliance with USFWS Section 10(a) of the Federal Endangered Species Act (FESA), Special Terms and Conditions for Endangered

and Threatened Wildlife Species Permit. The survey included six breeding season surveys in accordance with the USFWS current Coastal California Gnatcatcher Presence/Absence Survey Protocol, including notification to USFWS. According to the USFWS, the protocol for the breeding season was designed to provide a 95-percent confidence level of detecting coastal California gnatcatchers at a site when they are present. The accepted standard for protocol presence/ absence surveys for coastal California gnatcatcher is either six breeding season surveys or nine non-breeding season surveys; USFWS does not require completion of both breeding and non-breeding season surveys for the results to be considered valid. Furthermore, the potential habitat on the Project Site for supporting coastal California gnatcatcher is of marginal quality. Moreover, the site is generally surrounded by existing development; it is relatively fragmented from suitable habitat for coastal California gnatcatcher. Accordingly, continued surveys for the species are not necessary to determine presence/absence of the species. The removal or alteration of unoccupied habitat of marginal quality for the species within the Project Site would not result in adverse effects for the species, and compensatory mitigation is not warranted.

Response to Comment No. A1-8

The comment states the Project would result in permanent and/or temporary loss of streams and associated natural communities. The comment also states that the Project's impact on streams and associated natural communities has yet to be mitigated below a level of significance as the Project does not recommend the avoidance of impacts to streams or propose a setback distance from the streams on-site. In addition, the comment claims that the construction of a bridge with piers within the streambed, and the installation of undescribed streambank stabilization measures are not sufficiently analyzed in order to fully understand whether these activities may be considered a substantial impact on streams and associated natural communities. According to the comment, the proposed mitigation ratio of 1:1 may be insufficient to mitigate for impacts to streams and natural communities. Moreover, the comment also states that the Draft EIR does not provide a jurisdictional delineation or impact analysis for the modifications proposed to the Dockweiler Drive Extension Project, which includes the installation of a pedestrian and bike bridge from the Jan Heidt Newhall Metrolink Station on Railroad Avenue to the future extension of Dockweiler Drive.

As discussed on page 4.3-22 in Section 4.3, Biological Resources, of the Draft EIR, Project impacts to streams and associated riparian habitat would be potentially significant but would be mitigated to a less-than-significant level with implementation of Mitigation Measure MM-BIO-5 (Jurisdictional Waters and Wetlands). Avoidance of the unnamed ephemeral drainages would greatly restrict the available area for Project development and is not feasible for the reasonable development of the Project Site. However, the Project largely avoids and preserves in place the segment of Placerita Creek that traverses the Project Site. The Project would result in temporary and permanent impacts to Placerita Creek, but these impacts are the minimum necessary to allow for bridge construction and necessary flood control and bank protection improvements. Following Project construction, Placerita Creek would be preserved as open space within the Project Site. The design of the Placerita Creek channel generally maintains the existing scour and deposition characteristics and the placement of piers for the bridge have been evaluated in the *Hydraulic and Sediment Transport Analyses for Blackhall Studios*[4] (Hydraulic Report), prepared by Chang Consultants, dated January 19, 2022 (Appendix I-4 of the Draft EIR). As noted below, Mitigation

[4] Chang Consultants, Wayne W. Chang, MS, PE 46548, Hydraulic and Sediment Transport Analyses for Blackhall Studios, Draft Report, January 19, 2022 (Final Report June 5, 2023).

Measure MM-BIO-1 was clarified to state that access routes, staging, and construction areas are limited to the minimum area necessary to achieve the Project goal and minimize impacts to jurisdictional resources and sensitive natural communities, including locating access routes and ancillary construction areas outside of these areas. Although City agrees that 1:1 mitigation is low, the ephemeral drainages have very low habitat quality and a lower compensatory mitigation ratio may be appropriate if determined to be acceptable to the applicable regulatory agencies (including CDFW, the commenter) during the permitting process. The City agrees that typical mitigation is likely to be closer to 3:1 but would be subject to detailed analysis and permitting on a case-by-case basis. CEQA mitigation measures are not necessary to require notification of CDFW for construction and activities occurring near or impacting streams and associated natural communities and any corresponding Lake or Streambed Alteration (LSA) Agreement, as recommended by the comment, are not necessary as such notification and LSA Agreement are required by California Fish and Game Code Section 1602. While portions of the extension of Dockweiler Drive would be conducted in conjunction with the Project, these elements were evaluated previously for the Lyons Avenue/Dockweiler Drive Extension Project (SCH 2013082016), and jurisdictional resources were determined not to be present.

The following revisions and additions were made to Mitigation Measure MM-BIO-1 on page 4.3-19 of Section 4.3, Biological Resources, of the Draft EIR (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

MM-BIO-1: The Project shall implement the following best management practices (BMPs) during construction:

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries;
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction;
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species;
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be disposed of in closed containers only and removed daily from the Project Site;
- No deliberate feeding of wildlife shall be allowed;
- No pets shall be allowed on the Project Site;
- No firearms shall be allowed on the Project Site;
- If vehicle or equipment maintenance is necessary, it shall be performed In the designated staging areas;
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize

the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife; ~~and~~

- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills;~~.~~

- Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the Project goal and minimize impacts to jurisdictional resources and sensitive natural communities, including locating access routes and ancillary construction areas outside of these areas;

- To the satisfaction of the City, the Applicant shall retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan shall describe all species of special concern (SSC) that could occur within the Project Site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the Project Site. The qualified biologist should submit a copy of a Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the Project Site;

- To the satisfaction of the City, the Applicant shall retain a qualified biologist to conduct worker environmental awareness training. The qualified biologist shall communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so; and

- To avoid direct injury and mortality of SSC, the Applicant shall have a qualified biologist on-site to relocate wildlife of low mobility that may be injured or killed because of development. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project Site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist shall advise workers to proceed with caution. A qualified biologist shall be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist shall be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project phase until the cessation of all ground and habitat disturbing activities,

as well as vegetation removal, to ensure that no wildlife is harmed.

The biological monitor(s) shall have appropriate handling permits or shall obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.

A Scientific Collecting Permit is required to monitor Project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (14 Cal. Code of Regs. Section 650). The CDFW's Scientific Collection Permits webpage (https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678) provides additional information.

If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist should be notified, and dead or injured wildlife be documented immediately. A formal report shall be sent to CDFW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation techniques have been identified to prevent additional injury or death.

Response to Comment No. A1-9

The commenter states that Mitigation Measure MM-BIO-2 in the Draft EIR may not be sufficient to result in sufficient avoidance and mitigation for direct, indirect, and temporal impacts to California Species of Special Concern (SCC) that may occupy the Project Site. The commenter suggests take of SSC could require a mandatory finding of significance under CEQA. The commenter recommends the addition of pre-construction surveys for SSC and biological monitoring during ground- and habitat-disturbing activities to relocate any SSC that may be present. The commenter also states that a Scientific Collecting Permit would be required if the capture, temporary possession, and relocation of wildlife is necessary during project construction activities. The commenter provides recommended revisions to Mitigation Measure MM-BIO-3 for nesting birds. The commenter states the requirements for reporting observations of special status species, requests submittal of observation data to the California Natural Diversity Database should any special-status species be detected and provides guidance for submittal.

The SSC with potential to occur on the Project Site have wide geographic ranges. As analyzed in Section 4.3, Biological Resources, of the Draft EIR, the injury or death of limited individuals of SSC, if present, would not meet the threshold of significance for biological resources in Appendix G: Environmental Checklist Form of the CEQA Guidelines for a "substantial adverse

effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service." In addition, the threshold for a mandatory finding of significance is to "substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community." The injury or death of limited individuals of SSC, if present, due to Project construction activities would not contribute to a loss of population viability of these species and would not result in impacts that would meet this threshold of significance. As a result, additional mitigation measures requiring focused surveys for SSC species are not necessary to reduce Project impacts to a less-than-significant level. Nevertheless, as shown above, to be responsive to the commenter's concerns, Mitigation Measure MM-BIO-1 has been revised to include a relocation and avoidance plan, worker awareness training, and additional details regarding biological monitoring responsibilities and protocols, even though their inclusion is not necessary to reduce Project impacts to a less-than-significant level. The Project would comply with the requirements of a Scientific Collecting Permit in the specific situations in which a Scientific Collecting Permit is required. Mitigation Measure MM-BIO-3 as presented in the Draft EIR is sufficient to maintain compliance with the Migratory Bird Treaty Act and California Fish and Game Code. The recommended increases in nest buffer distances are neither necessary nor practicable given the urban nature of the area that surrounds the Project Site. All detected special status species would be reported to the California Natural Diversity Database in accordance with the requirements of PRC Section 21003(e).

While portions of the extension of Dockweiler Drive would be constructed in conjunction with the Project, these elements were previously evaluated in the Lyons Avenue/Dockweiler Drive Extension Project EIR (SCH 2013082016), which is available for review at the following website: https://www.santa-clarita.com/city-hall/departments/public-works/capital-improvement-projects/proposed-dockweiler-drive-extension.

Response to Comment No. A1-10

The Project would comply with the payment of fees upon filing of the Notice of Determination. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A1-11

CEQA Guidelines Section 15088(b) requires the City of Santa Clarita, as the lead agency, to provide a written response to comments on environmental issues received from a public agency at least 10 days prior to certifying the EIR. Accordingly, CDFW will have an opportunity to review the responses provided above. The City will also provide CDFW notification of Planning Commission and City Council hearings for the Project.

Response to Comment No. A1-12

The commenter provides recommended language and mitigation measures to be incorporated into the Project's Draft EIR, which summarize their prior comments. Specific responses to these recommendations are provided in Responses to Comments No. A1-5 through A1-9.

LETTER A2

METROLINK

May 22, 2023

Ms. Erika Iverson, Senior Planner
City of Santa Clarita
Attn: Shadowbox Studios Project Draft EIR
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

RE: Shadowbox Studios Project Draft EIR Comments

Dear Ms. Iverson:

Following review of the proposed Shadowbox Studios Project Draft EIR, the Southern California Regional Rail Authority (SCRRA) submits the following comments on key issues related to SCRRA and operations of the railroad adjacent to the project site.

As background information, SCRRA is a five-county Joint Powers Authority (JPA) that operates the regional commuter rail system known as Metrolink. Additionally, SCRRA provides rail engineering, construction, operations, and maintenance services to its five JPA member agencies. The JPA consists of the Los Angeles County Metropolitan Transportation Authority (Metro), San Bernardino County Transportation Authority (SBCTA), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), and Ventura County Transportation Commission (VCTC). **A2-1**

The railroad right of way (ROW) adjacent to the proposed project is a heavily trafficked railroad mainline. Trains are operated on the mainline and the ROW is maintained by SCRRA but owned by Metro. In addition to several freight trains operated daily, 28 Metrolink trains operate on weekdays through this corridor. Fewer trains operate on the weekends. Rail traffic along this corridor occurs 24 hours a day, seven days a week, and is expected to increase in the future to address growing demands.

The proposed modifications to the roadways at the railroad crossings and the railroad crossings themselves should account for the future addition of more tracks through the crossing. Given the width of the right of way here, the design should support up to at least three tracks being added. In addition, the Site Plan (Exhibit 3) seems to show the development encroaching on the ROW, which would not be **A2-2**

acceptable. This would need to be clarified, as it is not possible to tell what the encroaching elements are from the level of detail in the image. **A2-2 Continued**

Furthermore, the project location is located less than one mile from our Newhall Metrolink Station, which presents potential transit connectivity benefits to the full-service film and television studio campus. The project is conditioned to provide a Class I multi-purpose path which could provide a link for pedestrians and bicyclists to the Newhall Station and Old Town Newhall. This scenario would be ideal for mitigating transportation/traffic impacts, greenhouse gas emissions, air quality, etc. by encouraging employees and students to use public transportation. The Newhall Station is part of the Antelope Valley Line and we plan to increase the frequency to hourly with more midday service in the near future. Creating pedestrian and cyclist access to the Newhall Station would allow campus users to access this rail service. **A2-3**

Please find the general comments to the project Draft EIR review related to the railroad and its operations listed below.

1. All drainage from the development must drain away from the railroad corridor. This includes any irrigation runoff for landscaping along the railroad corridor.

2. All trees must be set back from the ROW line so that when fully matured, the trees do not hang over the ROW line onto railroad property.

3. A 6' fence is required along the railroad Property line. Since this will be a medium/high density office development, it is recommended that a 6' minimum high block wall be constructed along the railroad corridor instead of a fence to better secure access to the railroad ROW. **A2-4**

4. If noise from train operation is a concern, the City or Developer should conduct a noise study and consider constructing a sound barrier along the railroad property line.

5. Any proposed roadway/railroad or pedestrian/ railroad crossing improvements, whether at-grade or grade separated, must be coordinated with the California Public Utilities Commission (CPUC) and SCRRA.

6. Any proposed utility crossings with the railroad must be coordinated with SCRRA.

7. Adequate lighting should be provided on the property along the railroad corridor to deter trespassing onto the railroad ROW.

8. Site development plans (grading, drainage, landscaping, lighting, etc.) should be provided to SCRRA for review.

9. To assess any requirements for construction (including demolition or alteration of structures) adjacent to the railroad, plans for construction should be sent to Metrolink Right of Way at the following address:

   SCRRA - Pomona Office
   2700 Melbourne Ave
   Pomona, CA 91767

   Plans may be sent to the Metrolink Right of Way contact email at RightofEntry@scrra.net and you may access the Right of Way (ROW) Encroachment website at RIGHT OF WAY (ROW) ENCROACHMENT (metrolinktrains.com) for more information on the process.

A2-4
Continued

Thank you again for allowing us to provide commentary.

If you have any questions, please contact Roderick Diaz, Director of Planning and Development at (213) 452-0455 or via e-mail at diazr@scrra.net.

Sincerely,

Paul R. Hubler

Paul R. Hubler
CHIEF STRATEGY OFFICER

Letter No. A2
Paul Hubler, Chief Strategy Officer
Southern California Regional Rail Authority/ Metrolink
900 Wilshire Boulevard, Suite 1500
Los Angeles, CA 90017

Response to Comment No. A2-1

This introductory comment acknowledges receipt of the Draft EIR for the Project and introduces specific comments from the Southern California Regional Rail Authority (SCRRA). The comment also identifies SCRRA as a five-county Joint Powers Authority (JPA) that operates the regional commuter rail system, known as Metrolink, and provides rail engineering, construction, operations, and maintenance services to the Los Angeles County Metropolitan Transportation Authority (Metro), San Bernardino County Transportation Authority (SBCTA), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), and Ventura County Transportation Commission (VCTC). The comment also describes the railroad right-of-way (ROW) adjacent to the Project Site and its operation. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no response is warranted.

Response to Comment No. A2-2

The proposed grade crossing modifications layout and the number of tracks were closely coordinated with Metrolink for several years, including multiple diagnostics meetings, and do not preclude expansion for additional tracks. The Metrolink Engineering team reviewed and accepted the proposed configuration. The proposed grading within the ROW was requested by the Metrolink Engineering team to address some drainage erosion to the existing tracks. If Metrolink would like to change this request, the Project would be able to accommodate that accordingly.

Response to Comment No. A2-3

The comment recognizes that the proximity of the Jan Heidt Newhall Metrolink Station to the Project Site and the conditions imposed on the Project, including the provision of a Class I multi-purpose path that could provide a link for pedestrians and bicyclists to the Jan Heidt Newhall Metrolink Station and Old Town Newhall, present potential transit connectivity benefits to the Project, as well as for mitigating transportation/traffic impacts, GHG emissions, and air quality impacts, by encouraging employees to use public transportation. SCRRA plans to increase the frequency of service to the Antelope Valley Line, which includes the Jan Heidt Newhall Metrolink Station, to hourly with more midday service in the future. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no response is warranted.

Response to Comment No. A2-4

The comment provides general comments related to the railroad and its operations. The responses below correspond to each comment listed.

1. All runoff from the Project would be captured in a closed pipe system and conveyed to Placerita Creek. Prior to discharging into Placerita Creek the first flush runoff would be routed through either a system of underground infiltration chambers or an infiltration/drainage basin. Additionally, off-site runoff coming from under 12th street would be routed through the Project Site to Placerita Creek. A portion of this off-site stormwater during peak storm events would be routed to the infiltration/drainage basin to offset the

developed hydromodification flowrate and volume requirements. In addition, existing stormwater flows from 13th Street would be conveyed through the Project Site to the existing downstream Metrolink drain lines. Accordingly, all drainage from the Project, including irrigation runoff for landscaping, would drain away from the railroad corridor.

2. All trees would be set back from the railroad ROW to avoid encroachment into railroad property.
3. A 12-foot tall security fence primarily made of woodcrete would be installed along the majority of the perimeter of the Project Site. Open rail wrought iron fencing would be installed along the southwestern corner of the Project Site, adjacent to the proposed office building.
4. The proposed support building, which would extend along the majority of the western boundary of the Project Site, would provide the necessary acoustical buffer from the railroad noise to the sound stages.
5. The Project will coordinate with the California Public Utilities Commission (CPUC) and SCRRA and secure required permits and/or approvals regarding any proposed roadway/railroad or pedestrian/railroad crossing improvements associated with the Project.
6. The Project will coordinate with the CPUC and SCRRA and secure required permits and/or approvals regarding any utility lines crossing the railroad ROW.
7. Pole-mounted drive aisle lights would be installed along the 12-foot tall woodcrete fence along the western boundary of the Project Site.
8. Final site plans will be provided to SCRRA for review.
9. Final plans for construction will be sent to Metrolink Right of Way.

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LETTER A3

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:
eiverson@santa-clarita.com
Erika Iverson, Senior Planner
City of Santa Clarita
Community Development Department
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

May 19, 2023

Draft Environmental Impact Report (Draft EIR) for the Proposed Shadowbox Studios Project [Master Case 21-109] (Proposed Project)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The City of Santa Clarita is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments include recommended revisions to the project-level air quality mitigation measures, operational emissions from stationary and portable sources, Localized Significant Thresholds (LSTs) for construction and operational emissions analysis, health risk impacts during operation, and information about South Coast AQMD air permits that the Lead Agency should include in the Revised Draft EIR or the Final EIR. **A3-1**

South Coast AQMD Staff's Summary of Project Information in the Draft EIR

Based on the Draft EIR, the Lead Agency proposes construction of a 1,294,500 square-foot film and television studio campus on a currently vacant 93.5-acre parcel of land.[1] The Proposed Project is located near the northeast corner of Railroad Avenue and 13th Street in Santa Clarita. The overal site includes approximately: 1) 476,000 square feet of sound stages; 2) 571,000 square feet of workshops, warehouses and support uses; 3) 210,000 square feet of production and administrative offices; and 4) 37,500 square feet of catering and other specialty services.[2] Additionally, the Proposed Project seeks to build a bridge across Placerita Creek to provide employee access to a graded parking area located on the north side of Placerita Creek.[3] Based on a review of aerial photographs, South Coast AQMD staff finds that the nearest sensitive receptor (e.g., residence) is located within 25 feet north of the Proposed Project. The construction period is anticipated to last 25 months, which is expected to begin in 2023 and end in 2025.[4] **A3-2**

South Coast AQMD Staff's Comments on the Draft EIR

Operational Emissions from Stationary and Portable Sources

The Draft EIR states that operational criteria pollutant emissions are expected from the use of stationary source, six emergency generators operating four hours per day.[5] However, given the **A3-3**

[1] Draft EIR, p. ES-1.
[2] Ibid. p. 1.
[3] Ibid. p. 1.
[4] Ibid. p. 26.
[5] Ibid. p. 4.2-19.

Proposed Project's expansive scale, additional stationary and/or portable sources, which may include but are not limited to internal combustion engines, boilers, and spray booths, are typical equipment that would likely be utilized within the film and television studio campuses. Failing to account for these additional potential operational stationary and portable sources and the associated emissions in the analysis could lead to an underestimation of the total operational emissions.

Furthermore, upon examination of the Excel file titled "Generator and Food Truck Assumptions," provided by the Lead Agency, the "Max Generator Emissions – Daily" values were multiplied by 12 to derive the "Max Generator Emissions - 4 hours" without providing the basis, equations and documentation supporting the reasoning behind the math. As such, staff was not able to determine how the total annual DPM emissions were calculated. Therefore, the Lead Agency is recommended to provide further clarification and supporting documentation regarding the calculation methodology for determining the operating hours of the emergency generator and quantifying the projected emissions.

A3-3 Continued

Localized Significant Thresholds (LSTs) Analysis for Construction and Operational Activities

The Draft EIR contains an LST analysis of localized air quality construction and operation impacts to sensitive receptors in the vicinity of the Proposed Project as presented Appendix C – Air Quality and Greenhouse Gas Emissions Study,[6] Table 8 - Onsite Construction Emissions and Table 9 - Onsite Operation Emissions. The localized emissions were determined by relying on the Mass Rate LST Look-up Tables developed by South Coast AQMD.[7] However, based on aerial maps provided in the Draft EIR, the footprint of the Proposed Project spans approximately 93.5 acres, which is substantially larger than the allowed maximum footprint of five-acres in the Mass Rate LST Look-up Tables. In addition, it appears that the closest sensitive receptor (residence) is located adjacent to or within 25 feet north of the Proposed Project site but the Draft EIR relied upon emission screening criteria based on a distance of 82 feet (25 meters) for a five-acre site.[8] To remedy these inconsistencies, a re-evaluation of the localized construction and operational emissions by conducting air dispersion modeling, in lieu of relying on the Mass Rate LST Look-up Tables, is more appropriate for accurately predicting the ground-level concentrations needed for the LST analysis because air dispersion modeling takes into account project-specific factors such as: 1) the total acreage to be disturbed; 2) building downwash effects; 3) emissions and location of expected mobile sources, permitted sources, and other sources on-site.

A3-4

Therefore, South Coast AQMD staff recommends that the Lead Agency revise the LST analyses for project construction and operation by conducting air dispersion modeling and including the results of this analysis in either a Revised Draft EIR or Final EIR. If a revised LST analysis is not included in the Revised Draft EIR or Final EIR, the Lead Agency should provide reasons supported by substantial evidence in the record to explain why.

A3-5

[6] Appendix C Air Quality and Greenhouse Gas Emissions Study. Page 37.
[7] South Coast AQMD, Mass Rate LST Look-up Tables: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf
[8] Draft EIR. p. 4.2-13.

Health Risk Assessment (HRA) during Project Operation

CEQA Guidelines Sections 15126.2 and 15126.4 require a Draft EIR to include a description of the significant environmental effects of a Proposed Project, significant environmental effects which cannot be avoided, significant irreversible environmental changes, growth-inducing impacts, and mitigation measures proposed to minimize the significant adverse impacts. An impact is considered significant under CEQA if it leads to a "substantial, or potentially substantial, adverse change in the environment." In addition to the air quality impacts from the criteria air pollutants and greenhouse gases, the adverse air quality health risk impacts associated with increased emissions of toxic air contaminants (TACs) from all sources (including but not limited to expected future permitted stationary and portable sources, mobile sources, and other emission sources) during the operation phases need to be appropriately evaluated using qualitative and/or quantitative approaches to justify whether there will be potentially substantial adverse impacts.

However, the Draft EIR for the Proposed Project did not contain a comprehensive assessment of the health risk associated with mobile, stationary and portable sources during the operation phase. Please refer to the South Coast AQMD's guidance for performing a mobile source health risk assessment.[9] As a result, the potential cancer risk linked to the Proposed Project is unknown and undisclosed. This omission is concerning because the operation of a film and television studio campus is expected to involve various diesel-powered stationary and portable sources and vehicles that emit Diesel Particulate Matter (DPM), known as an air toxic and carcinogen. According to n Table 4 in the Transportation Assessment of the Draft EIR,[10] the total net new vehicle trips are 605 and 684 in the morning and the afternoon peak hours, respectively during operation of the Proposed Project. However, the Draft EIR did not mention how many of these truck trips are used for daily operations. Therefore, the Lead Agency is recommended to revise and identify the number of trucks potentially involved in the operational activities and include them in the Revised Draft EIR or Final EIR. If this additional information is not included in the Revised Draft EIR or Final EIR, the Lead Agency should provide reasons supported by substantial evidence in the record to explain why. A3-6

As mentioned earlier in this letter, the aerial maps indicate that the nearest sensitive receptor, a residential area, is located adjacent to or within 25 feet north of the Proposed Project site. As such, the Lead Agency is recommended to conduct an operational phase HRA, which should include evaluating truck emissions (including the truck routes to and from the site, truck loading/unloading docks, and their proximity to the sensitive receptors) and the impact of diesel-powered stationary and portable sources under the foreseeable probable future conditions. An HRA assessment is essential for determining the potential cancer risk impacts associated with the operation of the Proposed Project to the offsite sensitive receptors and workers so that they can be compared to the South Coast AQMD Air Quality Significance Thresholds for TACs[11] to determine whether there will be a potentially significant air quality impact. The analysis should also disclose the potential health risks for chronic and acute impacts of the Proposed Project's

[9] South Coast AQMD's guidance for performing a mobile source health risk assessment is available at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

[10] Transportation Assessment, Table 4. p. 25.

[11] South Coast AQMD. Air Quality Significance Thresholds. https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf

operation on residents living and/or workers working outside the Proposed Project's boundary in the Revised Draft EIR or Final EIR. If an HRA is not included in the Revised Draft EIR or Final EIR, the Lead Agency should provide reasons supported by substantial evidence in the record to explain why.

A3-6 Continued

South Coast AQMD Air Permits and Responsible Agency Role

If construction of the Proposed Project requires using the new stationary and portable sources, including but not limited to emergency generators, fire water pumps, boilers, spray booths, and etc., air permits from South Coast AQMD will be required. The Revised Draft EIR or Final EIR should include a discussion on stationary and portable equipment requiring South Coast AQMD permits and identify South Coast AQMD as a Responsible Agency for the Proposed Project. Any assumptions used for the stationary and portable sources in the Revised Draft EIR or the Final EIR will also be used as the basis for the permit conditions and limits for the Proposed Project. Please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385 for questions relative to air permits. General information on air permits is also available on South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits.

A3-7

Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), the Lead Agency is required to provide South Coast AQMD written responses to all comments contained herein at least 10 days prior to certifying the Revised Draft EIR or the Final EIR. In addition, as provided by CEQA Guidelines Section 15088(c), if the Lead Agency's position is at variance with the recommendations provided in this comment letter, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided.

A3-8

We appreciate the opportunity to review the Proposed Project. Thank you for considering these comments. South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Sahar Ghadimi, Air Quality Specialist, at sghadimi@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW:SG:BR
LAC230412-07
Control Number

Letter No. A3

Sam Wang, Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Response to Comment No. A3-1

The comment introduces South Coast Air Quality Management District (South Coast AQMD) comments on the Draft EIR and summarizes the specific concerns of the comments, including recommended revisions to the Project-level air quality mitigation measures, operational emissions from stationary and portable sources, Localized Significant Thresholds (LSTs) for construction and operational emissions analysis, health risk impacts during operation, and information about the South Coast AQMD permits that the commenter recommends the Lead Agency include in the Final EIR. Responses to specific comments are provided below in Response to Comment Nos. A3-3 through A3-6.

Response to Comment No. A3-2

The comment summarizes the Project description, location within the broader community, location of the nearest sensitive receptor, and the anticipated year of completion of Project construction. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no response is warranted.

Response to Comment No. A3-3

The comment notes that the Draft EIR included the operation of six emergency generators operating for up to four hours per day. The comment further stated that, given the nature of the Project, other stationary sources, such as boilers, internal combustion engines, and spray booths, could be typical of the film and television studio campus. It further asserts that failing to account for these additional sources could lead to an underestimation of the total operational emissions.

Subsequent to the initial analysis, it was determined that no generators would be included as part of the base Project. Generators, as needed, would be brought on-site by individual production entities, which would need to permit the generator use independent of the Project development. No changes to the emissions inventories in the Draft EIR have been made as emission levels are less than significant even with the inclusion of emissions from the previously assumed six generators. Thus, the emissions inventory and impact analysis in the Draft EIR are conservative.

Currently, it is unknown if any other permitted or non-permitted stationary or portable sources of toxic air pollutants (TACs) or pollutants would be included as part of the Project. Therefore, the EIR correctly analyzed the known. CEQA does not require the analysis of activities that are not known parts of the Project. It would be speculative at best to assume any of the mentioned sources. Accordingly, no additional analysis is necessary.

Additionally, the comment states that daily values for generator emissions were multiplied by 12 to derive the maximum emissions of four hours per day but was unable to determine how the emissions, specifically diesel particulate matter (DPM), were calculated. As stated in the assumptions, the six generators were assumed to be Tier 3 based on the data sheet for the model anticipated to be used. The generators were assumed to operate 20 minutes per month for testing.

Daily emissions in CalEEMod were estimated for all generators operating for 20 minutes per day once a month for testing purposes. The "mitigated" CalEEMod scenario resulted in a total of 0.0776 pounds per day of PM_{10} for the operation of all of the generators during the day. Then the 20 minutes of emissions were multiplied by three to get total emissions for an hour; that amount was multiplied by four to represent the total emissions for a maximum day when all generators would be operated for four hours. This was a worst-case representation of emissions. Therefore, the daily emissions for all generators operated for 20 minutes multiplied by 12 (3x4) would equal the maximum daily emissions for all generators operating for four hours in one day. As is typical of analysis where DPM is not directly monitored, PM_{10} is substituted for DPM. Therefore, total DPM emissions for the day would be the 0.0776 pounds per day multiplied by 12 or 0.9312 pounds per day as identified in the Draft EIR. Regardless, as discussed above, the base Project does not include generators, and, thus, the inclusion of emissions from generators in the Project's emissions inventory represents a conservative analysis.

Response to Comment No. A3-4

The comment states that due to the size of the Project Site, air dispersion modeling is a more appropriate analysis for determining significance for localized impacts than the use of the Mass Rate Look-Up tables, which formed the basis for the analysis. Specifically, the comment states, "it appears that the closest sensitive receptor (residence) is located adjacent to or within 25 feet north of the Proposed Project site but the Draft EIR relied upon emission screening criteria based on a distance of 82 feet (25 meters) for a five-acre site." The Mass Rate Look-Up tables were used as it is anticipated that less than five acres per day would be disturbed during construction activities. Additionally, the Draft EIR followed the South Coast AQMD's guidance, which states, "Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters."[5] On-site emissions from operational activities are minimal and well below the Mass Rate Look-Up values at no more than half of the screening threshold, even with the inclusion of six generators, which are no longer part of the Project. Removing the generators from the analysis would result in the following operational LST emissions analysis:

- NOx: 1 pound per day compared to a screening threshold of 236 pounds per day
- CO: 2 pounds per day compared to a screening threshold of 1,644 pounds per day
- PM_{10}: <1 pound per day compared to a screening threshold of 3 pounds per day
- $PM_{2.5}$: <1 pound per day compared to a screening threshold of 2 pounds per day

Given the low level of on-site operational emissions and the absence of any stationary sources, the Project is not anticipated to result in significant emissions regardless of the modeling methodology used.

Response to Comment No. A3-5

The comment states that the South Coast AQMD recommends the LST analysis be revised by conducting air dispersion modeling and including the results in a revised Draft EIR or a Final EIR. As explained in Response to Comment No. A3-4 above, the use of the Mass Rate Look-Up tables

[5] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, July 2008, p. 3-3.

is appropriate because it is anticipated that less than five acres per day would be disturbed during construction and operational emissions are negligible with respect to the thresholds. Therefore, dispersion is not necessary. See Response to Comment No. A3-4 above for additional information.

Response to Comment No. A3-6

The comment states that the Draft EIR did not contain a comprehensive assessment of health risk associated with mobile, stationary, and portable sources during Project operations. As discussed in detail in Response to Comment No. A3-3 above, there are no additional known sources of stationary or portable TACs associated with the operation of the Project. Additionally, generators would not be part of the Project and, as needed, would only be implemented by production that was leasing space from the studio. These generators would need to be permitted through the South Coast AQMD and the risk associated with the generators would be required to be below regulatory thresholds as part of the permitting process.

With respect to mobile sources, the comment questions the number of diesel trucks, and hence the DPM emissions, that would be associated with the Project. As discussed in the Level of Service Analysis of Gate 3 Modification Memorandum (included in Appendix L of the Draft EIR), the Project would result in a total of 7,293 vehicles per day.[6,7] Of those, 182 would be trucks, with 44 in the AM Peak hour and 38 in the PM peak hour. Of the 182 trucks, 15 percent (or ~28 trucks) would be Heavy Duty or Medium Heavy Duty Trucks; 55 percent (or ~101 trucks) would be Light Heavy Duty trucks, and 30 percent (or ~55 trucks) would be Medium Duty vehicles. Based on EMFAC 2021, approximately 85 percent of the Heavy Duty and Medium Heavy Duty vehicles, 39 percent of the light heavy duty vehicles, and 1 percent of the medium duty vehicles would be diesel.[8] This results in a total number of diesel trucks of 65. Even assuming 100 percent of Heavy and Medium Heavy duty trucks were diesel would result in less than 70 diesel trucks accessing the Project Site per day. Based on the California Air Resources Board's (CARB) 2005 Air Quality and Land Use Handbook, distribution centers with 100 or more diesel trucks per day or 40 or more diesel transport refrigeration units (TRUs) per day warrant the preparation of a health risk assessment (HRA) for mobile sources.[9] Therefore, given the number of diesel trucks being less than 100 and the nature of the development not requiring TRUs, there would not be a need for an operational HRA to evaluate mobile sources. Therefore, no operational HRA is required for the Project as part of the CEQA process.

Response to Comment No. A3-7

The Project will coordinate with the South Coast AQMD regarding any required air permits for the operation of stationary and portable sources. In addition, the comment updates the list of other agency approvals that would be required for the Project, as presented in Section 2.5.2, Other Agencies, of the Draft EIR, as follows:

6 Gibson Transportation Consulting, Inc., Level of Service Analysis of Gate 3 Modification Alternate Designs of Arch Stret & 13th Street LA-1 Shadowbox Studios, Santa Clarita, California, 2023.
7 Shadowbox Trip Generation Totals (included as **Attachment 2** to this Final EIR).
8 EMFAC Emission Rates for SCAQMD Calendar Year 2024 (included as **Attachment 3** to this Final EIR).
9 California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective. April 2005.

- The following was added after the last bullet on page 2.0-25 in Section 2.0, Project Description of the Draft EIR (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  To allow for operation of equipment emitting air pollutants, including, but not limited to, emergency generators and fire water pumps, the following permit would be required:

  - Air Permits from South Coast AQMD

This addition does not result in the Project creating any new or increased significant environmental impact that was not already identified in the Draft EIR.

Response to Comment No. A3-8

The comment requests written responses to South Coast AQMD comments prior to certification of the Final EIR. The City will provide written responses to all comments contained in this letter at least 10 days prior to certification of the Final EIR pursuant to PRC Section 21092.5(a) and CEQA Guidelines Section 15088. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

LETTER A4

COUNTY OF LOS ANGELES FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

ANTHONY C. MARRONE
FIRE CHIEF
FORESTER & FIRE WARDEN

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SECOND DISTRICT
LINDSEY P. HORVATH
THIRD DISTRICT
KATHRYN BARGER
FIFTH DISTRICT

May 12, 2023

Erika Iverson
23920 Valencia Boulevard
Santa Clarita, CA 91355

Dear Ms. Iverson:

THE DRAFT ENVIRONMENTAL IMPACT REPORT, "SHADOWBOX STUDIOS PROJECT" REQUESTS ENTITLEMENTS FOR THE DEVELOPMENT OF APPROXIMATELY 1.3 MILLION SQUARE FOOT FULL-SERVICE FILM AND TELEVISION STUDIO CAMPUS ON APPROXIMATELY A 93-ACRE SITE, CITY OF SANTA CLARITA, FFER2023002205

The Draft Environmental Impact Report reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. **A4-1**

The following are their comments:

PLANNING DIVISION: **A4-2**

We have no comments.

For any questions regarding this response, please contact Kien Chin, at (323) 881-2404 or Kien.Chin@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. **A4-3**

Specific fire and life safety requirements for the construction phase will be addressed at the Fire Department building plan check review. There may be additional fire and life safety requirements during this time.

LETTER A4 Continued

Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than 28 width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building. The roadway shall provide approved signs and/or stripping stating "NO PARKING - FIRE LANE" and shall be maintained in accordance with the County of Los Angeles Fire Code.

The fire hydrant requirements listed in Section's 4.13-9 and 4.17-13 shall be corrected to the following:
1) Install 8 public fire hydrants as noted by the Fire Department. All required public fire hydrants shall be installed, tested, and accepted prior to beginning construction.
2) Install 21 public on-site fire hydrants as noted by the Fire Department due to the size of development and to comply with Fire Protection System requirements. All required public on-site fire hydrants shall be installed, tested, and accepted prior to beginning construction.
3) Install 15 private on-site fire hydrants as noted by the Fire Department. All required private on-site fire hydrants shall be installed, tested, and approved prior to building occupancy.

A4-3 Continued

The fire flow requirements in Section's 4.16-24 and 4.17-13 shall be corrected to the following:
1) The required fire flow for the public fire hydrants and public on-site fire hydrants for this project is 4000 GPM at 20 psi residual pressure for 4 hours. Three (3) public fire hydrants flowing simultaneously may be used to achieve the required fire flow. An approved automatic fire sprinkler system is required for the proposed buildings within this development.
2) The required fire flow for the public fire hydrants and public on-site fire hydrants for this project is 4000 GPM at 20 psi residual pressure for 4 hours. Three (3) public fire hydrants flowing simultaneously may be used to achieve the required fire flow. An approved automatic fire sprinkler system is required for the proposed buildings within this development.

The north section of this property is located within the area described by the Fire Department as a Fire Hazard Severity Zone. A “Fuel Modification Plan” shall be submitted to the Fuel Modification for review by the Fuel Modification Unit prior to public hearing. Please contact the Department’s Fuel Modification Unit for details. The Fuel Modification Plan Review Unit is located at 605 North Angeleno Avenue in the City of Azusa CA 91702-2904. They may be reached at (626) 969-5205 or visit https://www.fire.lacounty.gov/forestry-division/forestry-fuel-modification

A4-4

Appendix N (Fire Protection Plan) needs to be submitted for review.

The Land Development Unit appreciates the opportunity to comment on this project. Should any questions arise, please contact Wally Collins at (323) 890-4243 or Wally.Collins@fire.lacounty.gov.

LETTER A4 Continued

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

Under the Los Angeles County Oak Tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured at 4 ½ feet above mean natural grade. An Oak Tree Permit is required for this project. Specific questions regarding oak tree permit requirements should be directed to the Los Angeles County Department of Regional Planning at (213) 974-6411.

A4-5

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

For any questions regarding this response, please contact Forestry Assistant, Matthew Ermino at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

A4-6

Please contact HHMD Hazardous Materials Specialist III, Jennifer Levenson at (323) 890-4114 or Jennifer.Levenson@fire.lacounty.gov if you have any questions.

Very truly yours,

RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:pg

Letter No. A4
Ronald M Durbin, Chief, Forestry Division
Prevention Services Bureau
County of Los Angeles Fire Department
1320 North Eastern Avenue
Los Angeles, CA 90063-3294

Response to Comment No. A4-1

The comment introduces specific comments from the different divisions within the County of Los Angeles Fire Department (LACoFD). The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A4-2

The comment acknowledges that the LACoFD Planning Division has no comments on the Draft EIR. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A4-3

The Project would be required to comply with all applicable LACoFD code, as adopted by the City of Santa Clarita, and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants at LACoFD building plan check review and before the Building Official issues building permits and certificates of occupancy.

The comment adds to and corrects the information presented in the Draft EIR regarding the number of fire hydrants that would be required for the Project. Accordingly, the second to last sentence in the last full paragraph on page 4.13-9 in Section 4.13, Public Services, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> The proposed buildings would be equipped with an approved automatic fire sprinkler system. In addition, ~~As~~ discussed in Section 4.16, Utilities and Service Systems, the Project would be required to install 8 public fire hydrants and ~~36~~ 21 public on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to construction, and 15 private on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to building occupancy. ~~to accommodate the development.~~

In addition, the comment corrects the information presented in the Draft EIR regarding the fire flow requirements for the Project. Accordingly, the first three sentences in the second paragraph under Threshold 4.16(a) on page 4.16-24 in Section 4.16, Utilities and Service Systems, of the Draft EIR, were revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> In addition, the Project would install 8-inch water meters (rated for 3,500 gpm continuous flow and 4,700 gpm as the maximum intermittent flow) in order to meet the fire-flow requirements for the Project, which is set at ~~2,500 gpm for 2 hours~~ 4,000 gpm for 4 hours at 20 psi. Three public fire hydrants flowing simultaneously may be used to achieve the required fire flow.~~With regard to public fire flow, the~~

> ~~Los Angeles County Fire Department's Fire Prevention Division has stipulated a requirement of 4,000 gpm at 20 psi for a duration of 4 hours. If multiple hydrants are used to meet this requirement, each hydrant would be required to have a flow of 1,250 gpm minimum for 2 hours at 20 psi.~~

Furthermore, the comment adds to and corrects the information presented in the Draft EIR regarding the number of fire hydrants and fire flow that would be required for the Project. Specifically, the second full paragraph on page 4.17-13 in Section 4.17, Wildfire, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> ~~Pursuant to County Code Section 20.16.060, the Project Site would meet a 2-hour on-site fire flow requirement of 2,500 gallons per minute (gpm) with a residual pressure of 20 pounds per square inch (psi).~~ As discussed in Section 4.16, Utilities and Service Systems, of this Draft EIR, the Project would install 8-inch water meters (rated for 3,500 gpm continuous flow and 4,700 gpm as the maximum intermittent flow) in order to provide adequate fire flow support on-site. Furthermore, as required by the Santa Clarita Valley Water Agency (SCV Water), the Project's service connections and metering would be sized for dual service for domestic and fire water needs. The LACoFD's Fire Prevention Division has also stipulated a public fire flow requirement of 4,000 gpm at 20 psi for a duration of 4 hours. Three public fire hydrants flowing simultaneously may be used to achieve the required fire flow. ~~If multiple hydrants are used to reach this requirement, each hydrant used would be required to have a flow of 1,250 gpm minimum for 2 hours at 20 psi, which would require the~~ Project would be required to install 8 public fire hydrants and ~~36~~ 21 public on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to construction, and 15 private on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to building occupancy. ~~to accommodate the proposed development.~~ In addition, the Project would connect to existing electrical and telecommunications infrastructure surrounding the Project Site. The required water meters and fire hydrants would comply with SCV Water and LACoFD standards.

These changes do not result in the Project creating any new or increased significant environmental impact that is not already identified in the Draft EIR.

Response to Comment No. A4-4

As identified in the Fire Prevention Plan prepared for the Project (see Appendix N of the Draft EIR), a Fuel Modification Plan will be submitted to LACoFD for review and approval prior to issuance of building permits. The Fire Prevention Plan will be submitted with the Fuel Modification Plan.

It should be noted that the Project would change the existing conditions of the Project Site, as the entire Project Site would either be developed with impervious surfaces or managed landscape areas. As such, the risk of wildfire on the Project Site would be reduced through development of the proposed structures and improvements as compared with existing conditions. By converting the flammable landscape currently existing on the Project Site to a development featuring hardscapes, sound stages, support and ancillary buildings, and irrigated/managed landscaped

areas, the Project would reduce fuel loads found on the Project Site and, thus, reduce the chances of a wildfire occurring or intensifying on-site and threatening surrounding properties. Furthermore, because the Project would not involve storage, use, or disposal of significant quantities of hazardous materials, there would be no significant sources of hazardous materials that could add to the fuel load and produce harmful pollutants in the event of a wildfire.

Response to Comment No. A4-5

As identified in Section 2.0, Project Description, of the Draft EIR, 13 of the 16 oak trees on the Project Site, including seven heritage trees, would be removed to accommodate Project development; three coast live oak trees on the ridge at the north end of the Project Site would be preserved with no anticipated encroachment. However, the Project would replace the removed trees with 211 oak trees, including coast live oak, Engelmann oak, valley oak, and southern live oak, as well as 450 trees of different non-oak varieties, including Bubba desert willow, Tuscarora crape myrtle, Brisbane box, little gem magnolia, fruitless olive, Canary Island pine, icee blue podocarpus, and Columbia plane tree. The Los Angeles County Oak Tree Ordinance is not applicable to the Project, as the site is within the incorporated City of Santa Clarita. Nonetheless, an Oak Tree Permit from the City would be required for the encroachment of the Project into the protected zone and the removal of oak trees.

The comment also identifies the statutory responsibilities of LACoFD's Forestry Division, including erosion control, which is addressed in Sections 4.6, Geology and Soils, and Section 4.9, Hydrology and Water Quality, of the Draft EIR; watershed management, which is also addressed in Section 4.9, Hydrology and Water Quality, of the Draft EIR; rare and endangered species and vegetation, which are addressed in Section 4.3, Biological Resources, of the Draft EIR; fuel modification for VHFHSZ, which is addressed Section 4.17, Wildfire, of the Draft EIR; archaeological and cultural resources, which are addressed in Section 4.4, Cultural Resources, of the Draft EIR; and oak trees, which are also addressed in Section 4.3, Biological Resources, of the Draft EIR.

Response to Comment No. A4-6

The comment acknowledges that LACoFD has no comments or requirements for the Project related to hazardous materials. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

LETTER A5

OFFICE OF THE SHERIFF

COUNTY OF LOS ANGELES

HALL OF JUSTICE

ROBERT G. LUNA, SHERIFF

May 18, 2023

Ms. Erika Iverson, Senior Planner
City of Santa Clarita
Department of Community Development
23920 Valencia Boulevard, Suite 302
Santa Clarita, California 91355

Dear Ms. Iverson:

SHADOWBOX STUDIOS PROJECT (MASTER CASE 21-109)
NOTICE OF AVAILABILITY OF A
DRAFT ENVIRONMENTAL IMPACT REPORT
REVIEW COMMENTS

Thank you for inviting the Los Angeles County Sheriff's Department (Department) to review and comment on the April 2023 Notice of Availability of a Draft Environmental Impact Report (DEIR), for the Shadowbox Studios Project (Project). The proposed Project is located on a vacant 93.5-acre site located at the northeast corner of Railroad Avenue and 13th Street. The project proposes to develop a full-service film and television studio campus of approximately 1,285,800 square feet total building area. The Project consists of 19 sound stages, a three-story production and administrative office building, workshops, warehouses, and support uses. In addition, the Project proposed a five-level parking structure to accommodate 1,072 parking spaces and would have a total of 2,684 parking spaces throughout the project site. A5-1

The proposed Project is located within the service area of the Department's Santa Clarita Valley Sheriff's Station (Station). Due to cumulative impacts, the proposed Project will impact the current level of service provided by the Station for the potential increase in employees, nighttime and daytime population proposed by the Project. The Project Applicant will be required to pay all development fees associated with the project, such as a law enforcement facilities mitigation fee. Accordingly, the Station reviewed the A5-2

DEIR and authored the attached responses (see correspondence dated May 18, 2023, from Captain Justin Diez). A5-2 Continued

Also, for future reference, the Department provides the following updated address and contact information for all requests for reviews comments, law documents, and other related correspondence: A5-3

Tracey Jue, Director
Facilities Planning Bureau
Los Angeles County Sheriff's Department
211 West Temple Street
Los Angeles, California 90012

Attention: Planning Section

Should you have any questions regarding this matter, please contact me, at (323) 526-5657, or your staff may contact Mr. Immanuel Chiang, of my staff, at (323) 526-5637.

Sincerely,

ROBERT G. LUNA, SHERIFF

Tracey Jue, Director
Facilities Planning Bureau

SH-AD-32A (8/17)

LETTER A5 Continued

COUNTY OF LOS ANGELES

SHERIFF'S DEPARTMENT

"A Tradition of Service Since 1850"

DATE: May 17, 2023
FILE NO:

OFFICE CORRESPONDENCE

FROM: JUSTIN R. DIEZ, CAPTAIN
SANTA CLARITA VALLEY
STATION

TO: TRACEY JUE, DIRECTOR
FACILITIES PLANNING BUREAU

SUBJECT: REVIEW COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR SHADOWBOX STUDIOS PROJECT (MASTER CASE 21-109)

Santa Clarita Sheriff's Station (Station) reviewed the Draft Environmental Impact Report (RDEIR), dated April 2023, for the Shadowbox Studios Project (Project). The project proposes to develop a full-service film and television studio campus on a vacant 93.5-acre site located at the northeast corner of Railroad Avenue and 13th Street. The Project proposes 19 sound stages approximately 475,500 square feet; a three-story production and administrative offices approximately 209,300 square feet; approximately 565,400 square feet of workshops, warehouses, and support uses; and approximately 35,600 square feet of catering and other specialty services. Upon completion, the campus would have an overall building area of approximately 1,285,800 square feet. The project also proposed a five-level, 1,072-space parking structure along with approximately 455 surface parking spaces throughout the main campus and a 1,157-space employee parking lot located on the north side of Placerita Creek for a total of 2,684 parking spaces on the project site. The Project's estimated construction schedule is approximately 2.5 years, starting in April 2024 and ending in September 2026. A5-4

The Station remains concerned that continued growth and intensification of multi-use land uses within the service area will ultimately contribute to significant cumulative impacts from this Project and other developments within the city on our department resources and operations. It is reasonable to expect that continued development will lead to a significant increase in the demand for law enforcement services. Meeting such demands require additional resources, including patrol deputies, other sworn deputies, support personnel, and attendant assets, such as patrol vehicles, support vehicles, communications equipment, weaponry, office furnishings/equipment, etc.

Due to the cumulative impacts of development projects within the city, the calls for service increase in its volume and types. Therefore, the project location may affect the police protection services provided by the Station. The Station recommends effective traffic and security plans be developed to address potential issues from vandalism and burglaries at the proposed Project site, in coordination with all jurisdictional approvals.

Also, the Station reviewed the concept drawings Figure 2-3, 2-12 and 4.1-4 DEIR to provide the following comments:

1. ***Special Protection Requirements or Recommendations:***

a. The proposed Project will benefit from a landscaping maintenance program that would minimize opportunities for individuals to hide. The Station also recommends limiting the height of hedge-type plants around security gates to allow visibility from the street.

A5-4
Continued

b. The installation of security cameras for a video monitoring system and building lights with motion sensors is beneficial, where feasible. Appropriate gate hardware such as keypad/keycard access, automatic gate closers, and tire spike strips can be implemented where feasible to limit unauthorized access and for easy monitoring. In addition, the proposed locations of exterior building security cameras shall be considered in areas where law enforcement can adequately identify vehicle license plates upon entry/exit into the proposed Project with adequate lighting to enhance visibility. Installation of security cameras inside the building at each level's entry/exit points, at the elevators, and at the stairwells can be considered where feasible.

c. Installation of low-level site security lighting throughout the site as required, and where feasible.

d. Effective traffic and security plans be developed to address potential issues from vandalism and burglaries at the proposed Project site, in coordination with all jurisdictional approvals.

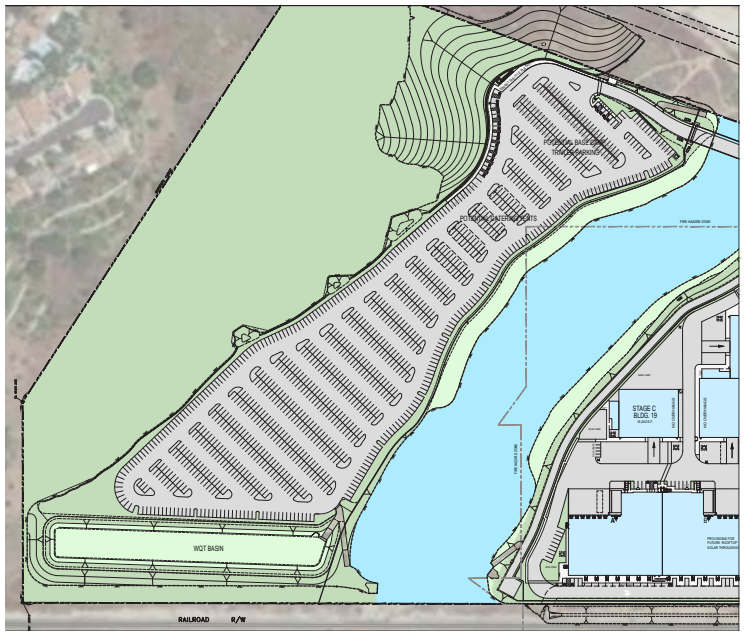
e. A Construction Traffic Management Plan should also be established as part of the proposed Project to address construction-related traffic congestion and emergency access issues. If temporary lane closures are necessary for the installation of utilities, emergency access should be maintained at all times. Flag persons and/or detours should be provided as needed to ensure safe traffic operations, and construction signs should be posted to advise motorists of reduced construction zone speed limits. **A5-4 Continued**

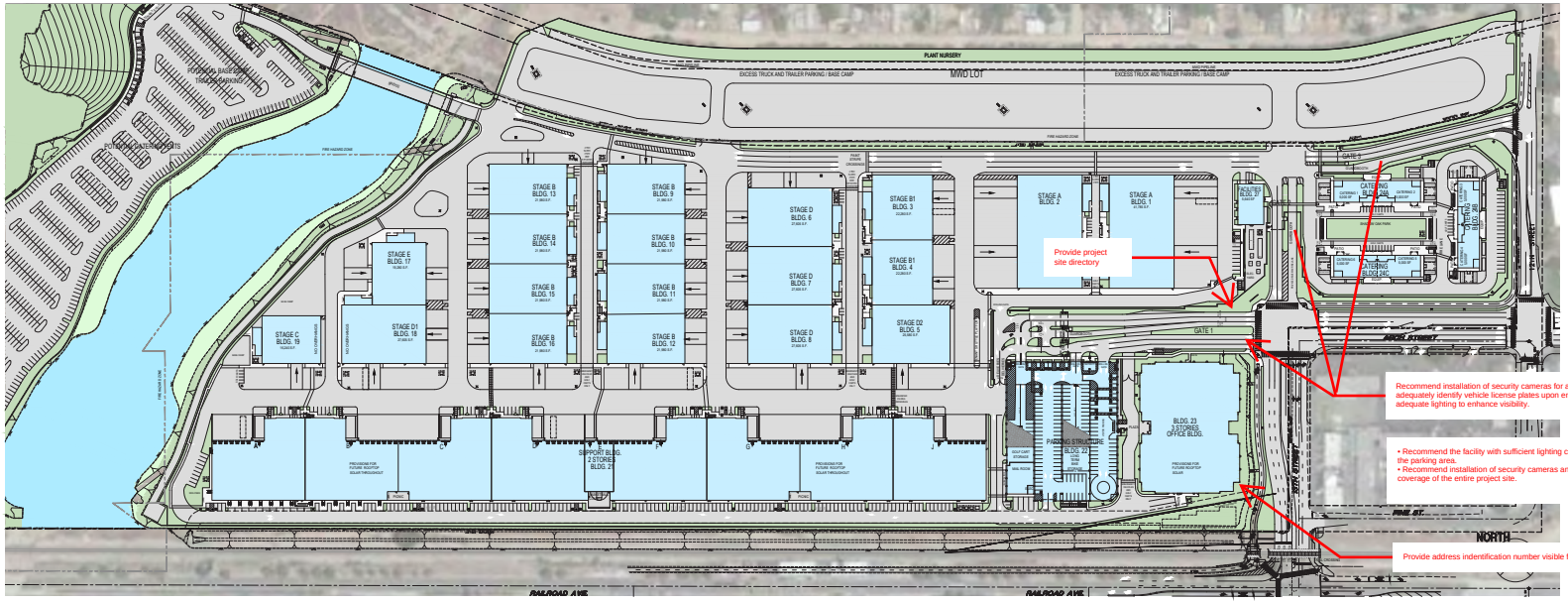
At this time, the Station has no further comments on the proposed Project. However, the Station reserves the right to amend or supplement our assessment upon subsequent reviews of the proposed Project once additional information becomes available.

Thank you for including the Station in the review process for the proposed Project. Should you have any questions regarding this matter, please contact Immanuel Chiang, Departmental Facilities Planner I, at (323) 526-5637, of our Facilities Planning Bureau.

Should you have any questions or require additional information, please contact Lieutenant Brandon Barclay at (661) 287-5702.

JRD:BLB:jg





A5-5

Source: GAA Architects, Inc., 2022

Michael Baker INTERNATIONAL

NOT TO SCALE

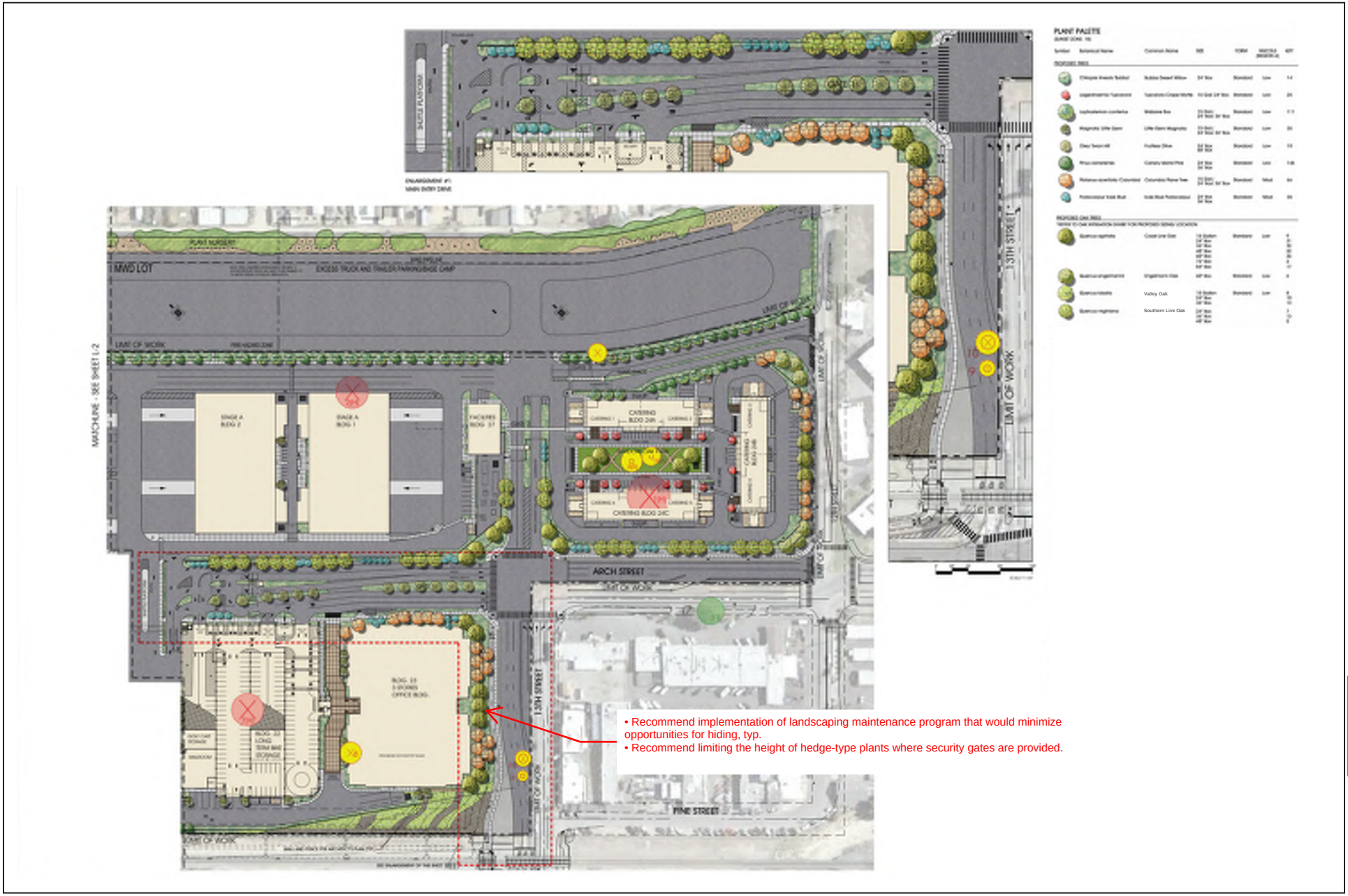
02/2023 • JN 187935

SHADOWBOX STUDIOS ENVIRONMENTAL IMPACT REPORT

Site Plan

Figure 2-3

LETTER A5 Continued



A5-6

Source: GAA Architects, Inc., 2022

Michael Baker INTERNATIONAL

NOT TO SCALE

03/2023 • JN 187935

SHADOWBOX STUDIOS ENVIRONMENTAL IMPACT REPORT

Conceptual Landscape Plan - Southern Portion of the Project Site

Figure 2-12

LETTER A5 Continued

Source: GAA Architects, Inc., 2022

SHADOWBOX STUDIOS ENVIRONMENTAL IMPACT REPORT

Michael Baker INTERNATIONAL

NOT TO SCALE

03/2023 • JN 187935

Conceptual Landscape Plan - Central Portion of the Project Site

Figure 2-13

LETTER A5 Continued

Source: GAA Architects, Inc., 2022

SHADOWBOX STUDIOS ENVIRONMENTAL IMPACT REPORT

Conceptual Landscape Plan - Portion of the Project Site North of Placerita Creek

Michael Baker INTERNATIONAL

NOT TO SCALE

03/2023 • JN 187935

Figure 2-14

Aerial south view from Railroad Avenue.

View of the entry gateway from Arch Street.

View of the southern portion of the Project from Arch Street showing the nursery and MWD lot.

View of southern portion of the Project from 13th Street and Arch Street showing the entrance gateway.

View of office building along 13th Street.

13th Street Walking Path Perspective.

A5-7

SHADOWBOX STUDIOS ENVIRONMENTAL IMPACT REPORT

Architectural Renderings: Project Views from the South

Figure 4.1-4

Michael Baker INTERNATIONAL

Source: GAA Architects.

03/2023 • JN 187935

Letter No. A5
Tracey Jue, Director
Facilities Planning Bureau
Los Angeles Sheriff's Department
211 West Temple Street
Los Angeles, CA 90012

Response to Comment No. A5-1

The comment acknowledges the Los Angeles Sheriff's Department's (LASD) receipt of the Notice of Availability of the Draft EIR and briefly summarizes the Project description. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A5-2

Section 4.13, Public Services, of the Draft EIR, acknowledges that Project implementation would result in an increase in demand on existing LASD services due to the generation of an employee population on-site. However, the Project would not include residential uses and, thus, would not induce unplanned population growth in the Project area. In addition, the Project would include several design features and security measures that would reduce the opportunity for criminal activity to occur on-site. The Project would implement security fencing, security cameras monitored full-time at a manned security station on-site, licensed security personnel, and additional stage security throughout the Project Site. These security features would adhere to principles of Crime Prevention Through Environmental Design. Furthermore, Project development would require consultation with LASD prior to approval of building plans and permits.

As required by the County and the City's Law Enforcement Facilities Fee, the Project would be required to pay all applicable development and law enforcement mitigation fees prior to the issuance of a building or similar permit. The payment of such fees would ensure that LASD has sufficient funding for future personnel and assets.

With full compliance with all applicable local laws, as well as implementation of site-specific security features, the Project's contribution to impacts to LASD services would not be cumulatively considerable, and, as such, cumulative impacts would be less than significant.

Response to Comment No. A5-3

The City has the updated address and contact information on file. The City will continue to send notices related to the Project to Ms. Jue. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A5-4

As discussed in Response to Comment No. A5-2 above, the Project Applicant will consult with LASD prior to approval of building plans and permits to ensure that all special protection requirements or recommendations mentioned in the comment, including, but not limited to, landscaping maintenance, security cameras, and lighting, are incorporated into the Project design. In addition, the Project will be required to prepare a Construction Traffic Management Plan to ensure that construction activities will not impede emergency access. See also Response to Comment No. A5-4.

Response to Comment No. A5-5

The Project would install security cameras for a video monitoring system that can adequately identify vehicle license plates with adequate lighting to enhance visibility. Project lighting has been designed to provide sufficient lighting for the entire campus and the parking areas. The Project would also provide wayfinding signs, including, but not limited to, a street address number visible from Railroad Avenue and 13th Street and site directory to orient visitors and guests on-site.

Response to Comment No. A5-6

The Project's landscaping plan has been designed to minimize opportunities for hiding and limit the height of hedge-type plans where security gates are provided.

Response to Comment No. A5-7

The Project would provide wayfinding signs, including, but not limited to, a street address number visible from Railroad Avenue and 13th Street.

LETTER A6

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager
1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

May 22, 2023

Ref. DOC 6887209

Ms. Erika Iverson, Senior Planner
City of Santa Clarita Planning Division
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

Dear Ms. Iverson:

DEIR Response to Shadowbox Studios Project

The Santa Clarita Valley Sanitation District (District) received a Draft Environmental Impact Report (DEIR) for the subject project on April 7, 2023. The proposed project is located within the jurisdictional boundaries of the District. Previous comments submitted by the District to your agency in correspondence dated April 22, 2022 (copy enclosed) still apply the subject project with the following comment: A6-1

- The expected average wastewater flow from Alternative 2 of the project, described in the DEIR as 199 apartment units, 775 attached dwelling units, and 50,000 square feet of commercial/mixed-use buildings, is 198,419 gallons per day. A6-2

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh

Enclosure

cc: A. Schmidt
A. Howard

LETTER A6 Continued

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager
1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

April 22, 2022

Ref. DOC 6502038

Mr. Mike Marshall, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

Dear Mr. Marshall:

NOP Response to Blackhall Studios

The Santa Clarita Valley Sanitation District (District) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on March 31, 2022. The proposed project is located within the jurisdictional boundaries of the District. We offer the following comments regarding sewerage service:

1. A portion of the project area is outside the jurisdictional boundaries of the District and will require annexation into District before sewerage service can be provided to the proposed development. For a copy of the District's Annexation Information and Processing Fee sheets, go to www.lacsd.org, Wastewater & Sewer Systems, and click on Annexation Program. For more specific information regarding the annexation procedure and fees, please contact Ms. Donna Curry at (562) 908-4288, extension 2708. A6-3

2. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the District, for conveyance to the District's San Fernando Road Trunk Sewer, located in a private right-of-way along the east side of San Fernando Road, south of Wiley Canyon Road. The District's 18-inch diameter trunk sewer has a capacity of 4.3 million gallons per day (mgd) and conveyed a peak flow of 0.1 mgd when last measured in 2018.

3. The District operates two water reclamation plants (WRPs), the Saugus WRP and the Valencia WRP, which provide wastewater treatment in the Santa Clarita Valley. These facilities are interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The SCVJSS has a capacity of 28.1 mgd and currently processes an average flow of 19.6 mgd.

4. The expected average wastewater flow from the project, described in the NOP as approximately 473,000 square feet of sound stages; approximately 561,500 square feet of workshops, warehouses, and support uses; approximately 221,000 square feet of production and administrative offices; and approximately 37,500 square feet of catering and other specialty services, is 154,863 gallons per day. For a copy of the District's average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Programs and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

5. The District is empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the District's Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the District for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the District's Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go

LETTER A6 Continued

to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the District will determine the user category (e.g. Condominium, Single Family Home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the District's Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

6. In order for the District to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the District's wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of District's facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the District's treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise the developer that the District intends to provide this service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of District's facilities.

A6-3 Continued

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh

cc: D. Curry
A. Howard
A. Schmidt

Letter No. A6

Mandy Huffman, Environmental Planner
Facilities Planning Department
Los Angeles County Sanitation Districts
1955 Workman Mill Road
Whittier, CA 90601

Response to Comment No. A6-1

The comment acknowledges receipt of the Draft EIR for the Project and refers to specific comments from the Santa Clarita Valley Sanitation District (District) regarding sewerage service that were submitted in response to the Notice of Preparation dated April 22, 2022. This NOP response from the District was included in Appendix A of the Draft EIR.

Response to Comment No. A6-2

The comment updates the information presented in Section 5.0, Alternatives, of the Draft EIR, as follows:

- The second sentence in the last paragraph on page 5.0-22 was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> ~~As with the Project,~~ Based on the information provided by the LACSD, the amount of wastewater generated by Alternative 2 is ~~based on the water demand identified above, which is equal to 0.32 million~~ 198,419 gallons per day (gpd). The water demand and the solid waste and wastewater generation are ~~substantially~~ greater than those identified for the Project (i.e., 207 AFY of water, ~~0.19 mgd~~ 186,301 gpd of wastewater, and 2,900 pounds of solid waste).

These revisions do not result in the Project creating any new or increased significant environmental impact that was not already identified in the Draft EIR.

Response to Comment No. A6-3

The information previously submitted by the District was reviewed, considered, and incorporated into the Draft EIR as pertinent under CEQA. As presented in response to Response to Comment No. A6-2, the wastewater generation under Alternative 2 has been updated. This update does not result in the Project or Alternative 2 creating any new or increased significant environmental impact that was not already identified in the Draft EIR.

The Project would be required to pay a fee to connect to the local sewer network. The City would not issue connection permits to the sewer system if it cannot be demonstrated that sufficient capacity exists to serve the Project.

The comment regarding the District's conformance to the requirements of the Federal Clean Air Act does not pertain to the Draft EIR. The comment is primarily made to inform the Project applicant that the District intends to provide sewerage service up to the levels that are legally permitted based on existing capacity and any proposed expansion of District facilities. The comment is noted for the administrative record and forwarded to the decision-makers for consideration.

LETTER A7

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

May 22, 2023

Erika Iverson
City of Santa Clarita Planning Division
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

Sent by Email: eiverson@santa-clarita.com

RE: Shadowbox Studios Project (Master Case 21-109)
Notice of Availability of Environmental Impact Report (EIR)

Dear Ms. Iverson:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed Shadowbox Studios Project (Project) located in the City of Santa Clarita (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

The purpose of this letter is to briefly describe the Project based on the Notice of Availability for the Environmental Impact Report (EIR) and outline recommended topics of study and project design features for the EIR concerning issues that are germane to our agency's statutory responsibility in relation to the Metro-owned right-of-way (ROW), which may be affected by the proposed Project.

A7-1

In addition to the specific comments outlined below, Metro is providing the City and Applicant with the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro-owned right-of-way (ROW) and transit facilities, available at https://www.metro.net/devreview.

Project Description
The Project includes construction of 19 sound stages, a three-story office building, and a four-story, 1,072 space parking structure with four aboveground levels proposed at the northeastern corner of Railroad Avenue and 13th Street. Additionally, the project is conditioned to construct a Class I multi-purpose path along the frontage on 12th, Arch, and 13th Streets. Modifications to the Dockweiler Drive Extension Project are also proposed. Modifications include widening the railroad crossing at Arch Street and 13th Street, 13th Steet and constructing a pedestrian and bike bridge from the Jan Heidt Newhall Metrolink Station on Railroad Avenue to the future extension of Dockweiler Drive.

Recommendations for EIR Scope and Content

Responsible Agency Status

Per Section 15381 of the CEQA Guidelines (14 Cal. Code of Regulations, div. 6, ch. 3), a "Responsible Agency" is "a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." Metro may need to approve permits, clearances, or agreements necessary to carry out portions of the Project, in particular for the bike path and other off-site improvements located within Metro's property. Therefore, Metro anticipates that we will be a Responsible Agency for the purposes of the preparation of this EIR and may rely on the EIR for its future approvals. A7-2

On page ES-5 and 2.0-25: Recommend including Los Angeles County Metropolitan Transportation Authority (Metro) as a listed agency for permits approval, as Metro would need to review and approve a license agreement for the proposed Class I Bike Trail along Railroad Avenue and the 13th Street crossing improvements.

Metrolink Adjacency

1. Operations: The Project site is adjacent to Metro-owned ROW operated and maintained by the Southern California Regional Rail Authority (SCRRA) to run the Metrolink commuter rail service. The Applicant is advised that rail service operates in both directions and that trains may operate 24 hours a day, seven days a week, in the ROW adjacent to the Project. A7-3

2. Impact Analysis: Due to the Project's proximity to Metrolink ROW and the proposed Class I Bike Trail within the ROW, the EIR must analyze potential effects on rail operations and identify mitigation measures as appropriate. Critical impacts to be studied should include (without limitation): impacts of Project construction and operation on and potential damage to the structural and systems integrity of tracks and related infrastructure; disruption to rail service; potential limitations to expansion of rail service as a result of the proposed Class I bike Trail and rail crossing safety for pedestrians and vehicles. Specific impacts and mitigation measures that should be studied include: A7-4

    a. Structure Setback: Structures that are immediately adjacent to the railroad ROW can pose safety hazards and may disrupt transit service and/or damage Metrolink infrastructure. Such conflicts can occur during Project construction and/or operation. The Applicant will generally not be permitted to access Metrolink ROW to maintain private development. A7-5

    b. Class I Bike Trail: The Class I Bike Trail proposed within the ROW can pose impacts to Metrolink service operations and create limitations to expansion of rail service. The Class I Bike Trail's impact to Metrolink service should be analyzed. A7-6

    Recommended mitigation measure:

        i. Technical Review: The Applicant shall submit engineering drawings and calculations, as well as construction work plans and methods including any crane placement and radius, to evaluate any impacts to the Antelope Valley Line infrastructure in relationship to the Project. Before issuance of any building permit for the Project, the Applicant shall obtain SCRRA's approval of final construction drawings. A7-7

        ii. Setback: Where the Project property is immediately adjacent to Metrolink ROW (owned by Metro), all Project structures shall be set back five a minimum of five (5) feet from property line to allow adequate space for property maintenance.

        iii. Access: Any access to railroad property is strictly at the discretion of Metro and SCRRA. The Applicant shall obtain specific Right-of-Entry temporary access permits from SCRRA for any work performed on the Project's structures or property requiring

access to the railroad ROW. Where feasible, the Applicant shall maintain fencing and walls at or near property lines from the private property side.

iv. Construction Monitoring: The Applicant shall permit Metro and/or SCRRA staff to monitor construction activity to ascertain any impact to the ROW. During construction, the Applicant shall construct a protection barrier to prevent objects, material, or debris from falling onto the ROW. The Applicant shall notify Metro and SCRRA of any changes to the construction/building plans that may or may not impact the ROW.

A7-7 Continued

c. At-Grade Crossings: There is an at-grade rail crossing in close proximity to the Project at the intersection of 13th Street and Railroad Avenue. The Project is likely to increase traffic volumes across this at-grade crossing, which could potentially impact the safety of the crossing. As such, these traffic and safety impacts should be analyzed. This rail crossing is regulated by the California Public Utilities Commission (CPUC). CPUC may have additional comments and requirements regarding this Project and should be contacted in consultation efforts.

Recommended mitigation measure: The Applicant shall analyze traffic and safety impacts and comply with all regulations and requirements of the CPUC with respect to the Project's potential impacts on the at-grade rail crossing at the intersection of 13th Street and Railroad Avenue.

Additionally, a new field diagnostic meeting with Metro/SCRRA is required to assess impacts to the nearest railroad at-grade crossings.

A7-8

3. Advisories to Applicant: The Applicant is encouraged to contact Metro Development Review Team and Metrolink staff early in the design process to plan for potential impacts. The Applicant should also be advised of the following:

a. Occupational Safety and Health Administration (OSHA) Requirements: Demolition, construction and/or excavation work in proximity to Metro-owned ROW with potential to damage subway tracks and related infrastructure may be subject to additional OSHA safety requirements.

b. Technical Review: Metro/SCRRA charges for staff time spent on engineering review and construction monitoring.

c. Cost of Impacts: The Applicant will be responsible for costs incurred by Metro or SCRRA resulting from Project construction/operation issues that cause delay or harm to Metrolink service delivery or infrastructure, including single-tracking or bus bridging around closures. The Applicant will also bear all costs for any noise mitigation required for the Project.

A7-9

Transit Supportive Planning: Recommendations and Resources

Considering the Project's proximity to the Jan Heidt Newhall Metrolink Station, Metro would like to identify the potential synergies associated with transit-oriented development:

1. Transit Supportive Planning Toolkit: Metro strongly recommends that the Applicant review the Transit Supportive Planning Toolkit which identifies 10 elements of transit-supportive places and, applied collectively, has been shown to reduce vehicle miles traveled by establishing community-scaled density, diverse land use mix, combination of affordable housing, and infrastructure projects for pedestrians, bicyclists, and people of all ages and abilities. This resource is available at https://www.metro.net/about/funding-resources/.

A7-10

2. Transit Connections and Access: Metro strongly encourages the Applicant to install Project features that help facilitate safe and convenient connections for pedestrians, people riding bicycles, and transit users to/from the Project site and nearby destinations. The City should consider requiring the installation of such features as part of the conditions of approval for the Project, including:

    a. Walkability: The provision of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA-compliant curb ramps, and other amenities along all public street frontages of the development site to improve pedestrian safety and comfort to access the nearby Metrolink Station.

    b. Bicycle Use and Micromobility Devices: The provision of adequate short-term bicycle parking, such as ground-level bicycle racks, and secure, access-controlled, enclosed long-term bicycle parking for residents, employees, and guests. Bicycle parking facilities should be designed with best practices in mind, including highly visible siting, effective surveillance, ease to locate, and equipment installation with preferred spacing dimensions, so bicycle parking can be safely and conveniently accessed. Similar provisions for micro-mobility devices are also encouraged. The

    c. First & Last Mile Access: The Project should address first-last mile connections to transit and is encouraged to support these connections with wayfinding signage inclusive of all modes of transportation. For reference, please review the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability_path_design_guidelines.pdf

A7-11

3. Parking: Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.

A7-12

If you have any questions regarding this letter, please contact me by phone at 213.547.4326, by email at DevReview@metro.net, or by mail at the following address:

Metro Development Review
One Gateway Plaza
MS 99-22-1
Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP
Senior Manager, Development Review Team
Transit Oriented Communities

Attachments and links:

- Adjacent Development Handbook: https://www.metro.net/devreview

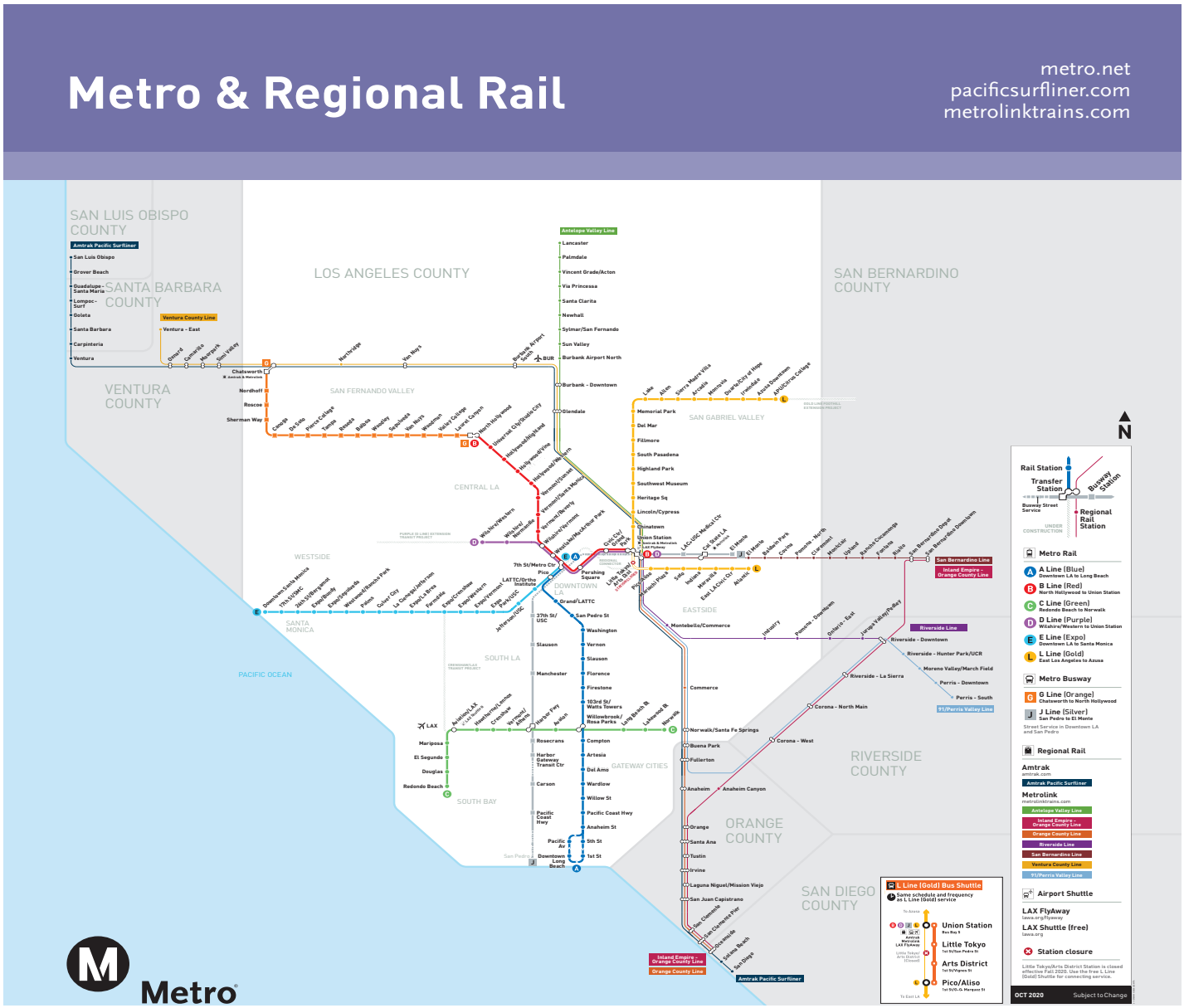
Los Angeles County
Metropolitan Transportation Authority

METRO ADJACENT DEVELOPMENT HANDBOOK

A GUIDE FOR CITIES AND DEVELOPERS

February 2021

Metro and Regional Rail Map



Metro is currently undertaking the largest rail infrastructure expansion effort in the United States. A growing transit network presents new opportunities to catalyze land use investment and shape livable communities.

Table of Contents

Quick Overview

Purpose of Handbook

The Metro Adjacent Development Handbook (Handbook) is intended to provide information and guide coordination for projects adjacent to, below, or above Metro transit facilities (e.g. right-of-way, stations, bus stops) and services.

Overarching Goal
By providing information and encouraging early coordination, Metro seeks to reduce potential conflicts with transit services and facilities, and identify potential synergies to expand mobility and improve access to transit.

Intended Audience
The Handbook is a resource for multiple stakeholder groups engaged in the development process, including:

- Local jurisdictions who review, entitle, and permit development projects,
- Developers,
- Property owners,
- Architects, engineers, and other technical consultants,
- Builders/contractors,
- Utility companies, and
- other Third Parties.

Handbook Content
The Handbook includes:

- **Introduction** of Metro's Development Review coordination process, common concerns, and typical stages of review.
- **Information** on best practices during three key coordination phases to avoid potential conflicts or create compatibility with the Metro transit system:
  - Planning & Conceptual Design,
  - Engineering & Technical Review, and
  - Construction Safety & Monitoring.
- **Glossary** with definitions for key terms used throughout the Handbook.

RULE OF THUMB: 100 FEET

Metro's Development Review process applies to projects that are within 100 feet of Metro transit facilities.

While the Handbook summarizes key concerns and best practices for adjacency conditions, it does not replace Metro's technical requirements and standards.

Prior to receiving approval for any construction activities adjacent to, above, or below Metro facilities, Third Parties must comply with the Metro Adjacent Construction Design Manual, available on Metro's website.

Contact Us
For questions, contact the Development Review Team:

- Email: devreview@metro.net
- Phone: 213.418.3484
- Online In-take Form: https://jpropublic.metro.net/in-take-form

Additional Information & Resources

- Metro Development & Construction Coordination website: https://www.metro.net/devreview
- Metro GIS/KML ROW Files: https://developer.metro.net/portfolio-item/metro-right-of-way-gis-data
- Metrolink Standards and Procedures: https://www.metrolinktrains.com/about/agency/engineering--construction

Metro will continue to revise the Handbook, as needed, to reflect updates to best practices in safety, operations, and transit-supportive development.

Background

Who is Metro?

The Los Angeles County Metropolitan Transportation Authority (Metro) plans, funds, builds, and operates rail, bus, and other mobility services (e.g. bikeshare, microtransit) throughout Los Angeles County (LA County). On average, Metro moves 1.3 million people each day on buses and trains. With funding from the passage of Measure R (2008) and Measure M (2016), the Metro system is expanding. Over the next 40 years, Metro will build over 60 new stations and over 100 miles of transit right-of-way (ROW). New and expanded transit lines will improve mobility across LA County, connecting riders to more destinations and expanding opportunities for development that supports transit ridership. Metro facilities include:

Metro Rail: Metro operates heavy rail (HRT) and light rail (LRT) transit lines in underground tunnels, along streets, off-street in dedicated ROW, and above street level on elevated structures. Heavy rail trains are powered by a "third rail" along the tracks. Light rail vehicles are powered by overhead catenary systems (OCS). To support rail operations, Metro owns and maintains traction power substations (TPSS), maintenance yards, and other infrastructure.

Metrolink/Regional Rail: Metro owns a majority of the ROW within LA County on which the Southern California Regional Rail Authority (SCRRA) operates Metrolink service. Metrolink is a commuter rail system with seven lines that span 388 miles across five counties, including: Los Angeles, Orange, Riverside, San Bernardino, Ventura, and North San Diego. As a SCRRA member agency and property owner, Metro reviews development activity adjacent to Metro-owned ROW on which Metrolink operates, and coordinates with Metrolink on any comments or concerns. Metrolink has its own set of standards and processes, see link on page 1.

Metro Bus Rapid Transit (BRT): Metro operates accelerated bus transit, which acts as a hybrid between rail and traditional bus service. Metro BRT may operate in a dedicated travel lane within a street or freeway, or off-street along dedicated ROW. Metro BRT stations may be located on sidewalks within the public right-of-way, along a median in the center of streets, or off-street on Metro-owned property.

Metro Bus: Metro operates 170 bus lines across more than 1,400 square miles in LA County. The fleet serves over 15,000 bus stops with approximately 2,000 buses. Metro operates "Local" and "Rapid" bus service within the street, typically alongside vehicular traffic, though occasionally in "bus-only" lanes. Metro bus stops are typically located on sidewalks within the public right-of-way, which is owned and maintained by local jurisdictions. Metro's NextGen Bus Plan re-envisions bus service across LA County to make service improvements that better serve riders.

Why is Metro interested in adjacent development?

Metro Supports Transit Oriented Communities: Metro is redefining the role of the transit agency by expanding mobility options, promoting sustainable urban design, and helping transform communities throughout LA County. Metro seeks to partner with local, state, and federal jurisdictions, developers, property owners and other stakeholders across LA County on transit-supportive planning and developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

Adjacent Development Leads to Transit Oriented Communities: Metro supports private development adjacent to transit as this presents a mutually beneficial opportunity to enrich the built environment and expand mobility options. By connecting communities, destinations, and amenities through improved access to public transit, adjacent developments have the potential to:

- reduce auto dependency,
- reduce greenhouse gas emissions,
- promote walkable and bikeable communities that accommodate more healthy and active lifestyles,
- improve access to jobs and economic opportunities, and
- create more opportunities for mobility – highly desirable features in an increasingly urbanized environment.

Opportunity: Acknowledging an unprecedented opportunity to influence how the built environment develops along and around transit and its facilities, Metro has created this document. The Handbook helps ensure compatibility between private development and Metro's transit infrastructure to minimize operational, safety, and maintenance issues. It serves as a crucial first step to encourage early and active collaboration with local stakeholders and identify potential partnerships that leverage Metro initiatives and support TOCs across LA County.

Metro Purview & Concerns

Metro Purview for Review & Coordination

Metro is interested in reviewing development, construction, and utility projects within 100 feet of Metro transit facilities, real estate assets, and ROW – as measured from the edge of the ROW outward – both to ensure the structural safety of existing or planned transit infrastructure and to maximize integration opportunities with adjacent development. The Handbook seeks to:

- Improve communication and coordination between developers, jurisdictions, and Metro.
- Identify common concerns associated with developments adjacent to Metro ROW.
- Highlight Metro operational needs and requirements to ensure safe, continuous service.
- Prevent potential impacts to Metro transit service or infrastructure.
- Maintain access to Metro facilities for riders and operational staff.
- Avoid preventable conflicts resulting in increased development costs, construction delays, and safety impacts.
- Streamline the review process to be transparent, clear, and efficient.
- Assist in the creation of overall marketable and desirable developments.

Key Audiences for Handbook

The Handbook is intended to be used by:

- Local jurisdictions who review, entitle, and permit development projects and/or develop policies related to land use, development standards, and mobility,
- Developers, property owners,
- Architects, engineers, design consultants,
- Builders/contractors,
- Entitlement consultants,
- Environmental consultants,
- Utility companies, and
- other Third Parties.

Metro Assets & Common Concerns for Adjacent Development

The table on the facing page outlines common concerns for development projects and/or construction activities adjacent to Metro transit facilities and assets. These concerns are discussed in greater detail in the following chapters of the Handbook.

METRO ASSETS	COMMON ADJACENCY CONCERNS
 **UNDERGROUND ROW** Transit operates below ground in tunnels.	• Excavation near tunnels and infrastructure • Clearance from support structures (e.g. tiebacks, shoring, etc) • Coordination with utilities • Clearance from ventilation shafts, surface penetrations (e.g. emergency exits) • Surcharge loading of adjacent construction • Explosions • Noise and vibration/ground movement • Storm water drainage
 **AERIAL ROW** Transit operates on elevated guideway, typically supported by columns.	• Excavation near columns and support structures • Column foundations • Clearance from OCS • Overhead protection and crane swings • Setbacks from property line for maintenance activities to occur without entering ROW • Coordination with utilities • Noise reduction (e.g. double-paned windows)
 **AT-GRADE ROW** Transit operates in dedicated ROW at street level; in some cases tracks are separated from adjacent property by fence or wall.	• Pedestrian and bicycle movements and safety • Operator site distance/cone of visibility • Clearance from OCS • Crane swings and overhead protection • Trackbed stability • Storm water drainage • Noise/vibration • Driveways near rail crossings • Setbacks from property line for maintenance activities to occur without entering ROW • Utility coordination
 **BUS STOPS** Metro operates bus service on city streets. Bus stops are located on public sidewalks.	• Lane closures and re-routing service during construction • Temporary relocation of bus stops • Impacts to access to bus stops
 **NON-REVENUE/OPERATIONAL** Metro owns and maintains property to support operations (e.g. bus and rail maintenance facilities, transit plazas, traction power substations, park-and-ride parking lots).	• Excavation and clearance from support structures (e.g. tiebacks, shoring, etc) • Ground movement • Drainage • Utility coordination • Access to property

Metro Coordination Process

Typical Stages of Metro Review and Coordination

Early coordination helps avoid conflicts between construction activities and transit operations and maximizes opportunities to identify synergies between the development project and Metro transit services that are mutually beneficial.

*Phases above may include fees for permits and reimbursement of Metro staff time for review and coordination.

Coordination Goal: Metro encourages developers to consult with the Development Review Team early in the design process to ensure compatibility with transit infrastructure and minimize operational, safety, and maintenance issues with adjacent development. The Development Review team will serve as a case manager to developers and other Third Parties to facilitate the review of plans and construction documents across key Metro departments.

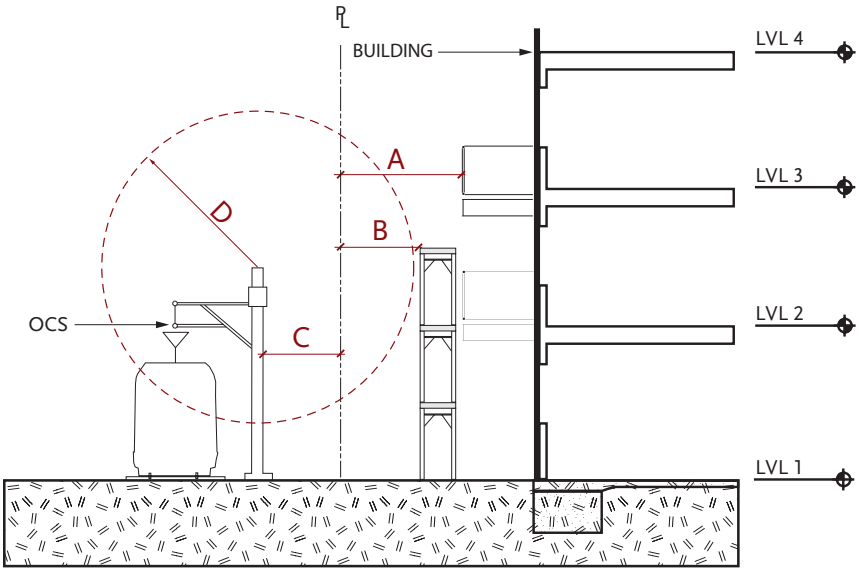
Level of Review: Not all adjacent projects will require significant review and coordination with Metro. The level of review depends on the Project's proximity to Metro, adjacency conditions, and the potential to impact Metro facilities and/or services. For example, development projects that are excavating near Metro ROW or using cranes near transit facilities require a greater level of review and coordination. Where technical review and construction monitoring is needed, Metro charges fees for staff time, as indicated by asterisk in the above diagram.

Permit Clearance: Within the City of Los Angeles, Metro reviews and clears Building & Safety permits for projects within 100 feet of Metro ROW, pursuant to Zoning Information 1117. To ensure timely clearance of these permits, Metro encourages early coordination as noted above.

To begin consultation, submit project information via an online In-Take Form, found on Metro's website. Metro staff will review project information and drawings to screen the project for any potential impacts to transit facilities or services, and determine if require further review and coordination is required. The sample sections on the facing page illustrate adjacency condition information that helps Metro complete project screening.

Contact:
Metro Development Review Team
Website: https://www.metro.net/devreview
Online In-take Form: https://jpropublic.metro.net/in-take-form
Email: devreview@metro.net
Phone: 213.418.3484

Sample Section: Adjacency Conditions



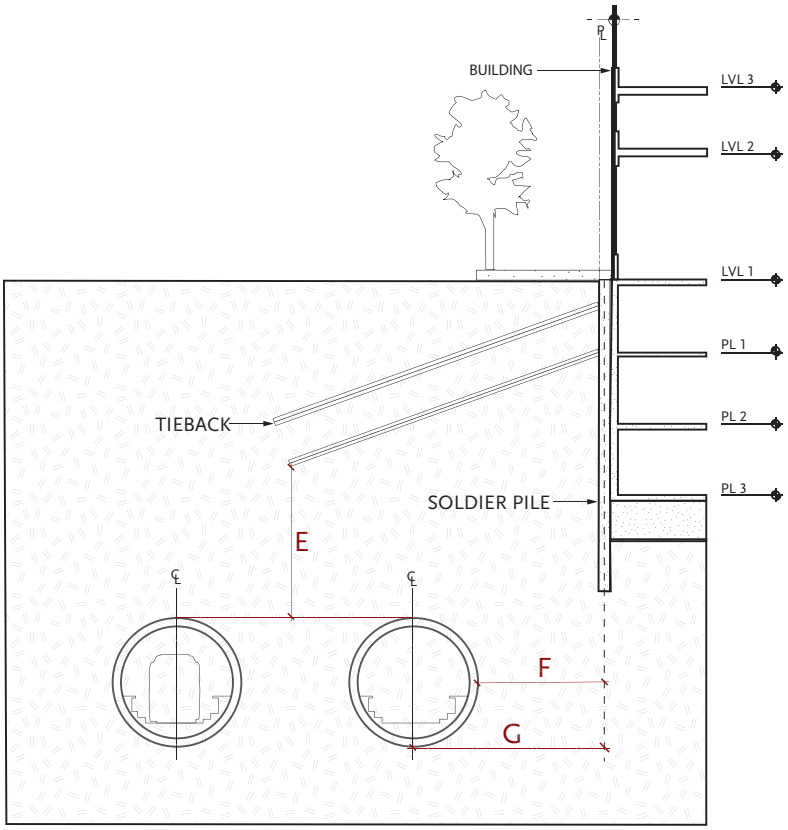
AT-GRADE CONDITION

A. Distance from property line to nearest permanent structure (e.g. building facade, balconies, terraces). Refer to Section 1.3 Building Setback of Handbook.

B. Distance from property line to nearest temporary construction structures (e.g. scaffolding).

C. Distance from property line to nearest Metro facility.

D. Clearance from nearest temporary and/or permanent structure to overhead catenary system (OCS). Refer to Section 1.4, OCS Clearance of Handbook.



BELOW-GRADE CONDITION

E. Vertical distance from top of Metro tunnel to closest temporary and/or permanent structure (e.g. tiebacks, foundation). Refer to Section 2.2, Proximity to Tunnels & Underground Infrastructure of Handbook.

F. Horizontal distance from exterior tunnel wall to nearest structure.

G. Horizontal distance from Metro track centerline to nearest structure.

Best Practices

Best Practices for Developer Coordination

Metro encourages developers of projects adjacent to Metro ROW and/or Real Estate Assets to take the following steps to facilitate Metro project review and approval:

1. **Review Metro resources and policies:** The Metro Development & Construction Coordination website and Handbook provide important information for those interested in constructing on, adjacent, over, or under Metro ROW, non-revenue property, or transit facilities. Developers and other Third Parties should familiarize themselves with these resources and keep in mind common adjacency concerns when planning a project.

2. **Contact Metro early during design process:** Metro welcomes the opportunity to provide feedback early in project design, allowing for detection and resolution of important adjacency issues, identification of urban design and system integration opportunities, and facilitation of permit approval. Metro encourages project submittal through the online In-Take Form to begin consultation.

3. **Maintain communication:** Frequent communication with Metro during project design and construction will reinforce relationships and allow for timely project completion. Contact us at devreview@metro.net or at 213.418.3484.

Best Practices for Local Jurisdiction Notification

To improve communication between Metro and the development community, Metro suggests that local jurisdictions take the following steps to notify property owners of coordination needs for properties adjacent to Metro ROW by:

- **Updating GIS and parcel data:** Integrate Metro ROW files into the City/County GIS and/or Google Earth Files for key departments (e.g. Planning, Public Works, Building & Safety) to notify staff of Metro adjacency and need for coordination during development approval process.Download Metro's ROW files here.

- **Flag Parcels:** Create an overlay zone as part of local Specific Plan(s) and/or Zoning Ordinance(s) to tag parcels that are within 100 feet Metro ROW and require coordination with Metro early during the development process [e.g. City of Los Angeles Zone Information and Map Access System (ZI-1117)].

- **Provide Resources:** Direct all property owners and developers interested in parcels within 100 feet of Metro ROW to Metro's resources (e.g. website, Handbook).


M
Metro
Downtown
Santa
Monica
E

Site Plan & Conceptual Design

Site Plan & Conceptual Design

1.1 Supporting Transit Oriented Communities

Transit-oriented communities (TOCs) are places that, by their design, make it more convenient to take transit, walk, bike or roll than to drive. By working closely with the development community and local jurisdictions, Metro seeks to ensure safe construction near Metro facilities and improve compatibility with adjacent development to increase transit ridership.

RECOMMENDATION: Consider site planning and building design strategies to that support transit ridership, such as:

- Leveraging planning policies and development incentives to design a more compelling project that capitalizes on transit adjacency and economy of scales.
- Programming a mix of uses to create lively, vibrant places that are active day and night.
- Utilizing Metro policies and programs that support a healthy, sustainable, and welcoming environment around transit service and facilities.
- Prioritizing pedestrian-scaled elements to create spaces that are comfortable, safe, and enjoyable.
- Activating ground floor with retail and outdoor seating/activities to bring life to the public environment.
- Reducing and screening parking to focus on pedestrian activity.
- Incorporating environmental design elements that help reduce crime (e.g. windows and doors that face public spaces, lighting).

The Wilshire/Vermont Metro Joint Development project leveraged existing transit infrastructure to catalyze a dynamic and accessible urban environment. This project accommodates portal access into the Metro Rail system and on-street bus facilities.

1.2 Enhancing Access to Transit

Metro seeks to create a comprehensive, integrated transportation network and supports infrastructure and design that allows safe and convenient access to its multi-modal services. Projects in close proximity to Metro's services and facilities present an opportunity to enhance the public realm and connections to/from these services for transit riders as well as users of the developments.

RECOMMENDATION: Design projects with transit access in mind. Project teams should capitalize on the opportunity to improve the built environment and enhance the public realm for pedestrians, bicyclists, persons with disabilities, seniors, children, and users of green modes. Metro recommends that projects:

- Orient major entrances to transit service, making access and travel safe, intuitive, and convenient.
- Plan for a continuous canopy of shade trees along all public right-of-way frontages to improve pedestrian comfort to transit facilities.
- Add pedestrian lighting along paths to transit facilities and nearby destinations.
- Integrate wayfinding and signage into project design.
- Enhance nearby crosswalks and ramps.
- Ensure new walkways and sidewalks are clear of any obstructions, including utilities, traffic control devices, trees, and furniture.
- Design for seamless, multi-modal pedestrian connections, making access easy, direct, and comfortable.

The City of Santa Monica leveraged investments in rail transit and reconfigured Colorado Avenue to form a multi-modal first/last mile gateway to the waterfront from the Downtown Santa Monica Station. Photo by PWP Landscape Architecture

1.3 Building Setback

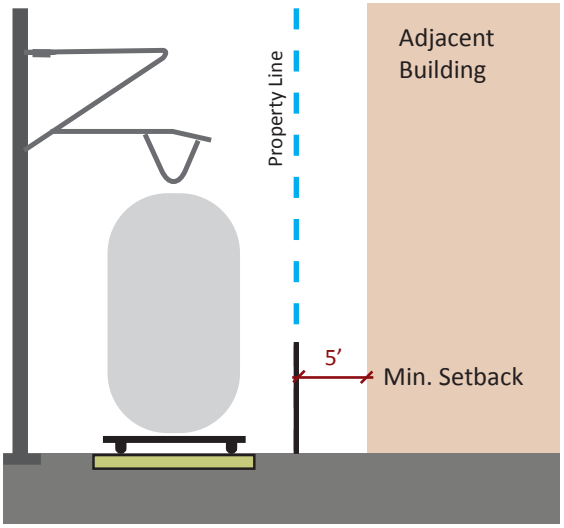
Buildings and structures with a zero lot setback that closely abut Metro ROW can pose concerns to Metro during construction. Encroachment onto Metro property to construct or maintain buildings is strongly discouraged as this presents safety hazards and may disrupt transit service and/or damage Metro infrastructure.

RECOMMENDATION: Include a minimum setback of five (5) feet from the property line to building facade to accommodate the construction and maintenance of structures without the need to encroach upon Metro property. As local jurisdictions also have building setback requirements, new developments should comply with the greater of the two requirements.

Entry into the ROW by parties other than Metro and its affiliated partners requires written approval. Should construction or maintenance of a development necessitate temporary or ongoing access to Metro ROW, a Metro Right of Entry Permit must be requested and obtained from Metro Real Estate for every instance access is required. Permission to enter the ROW is granted solely at Metro's discretion.

Coordination between property owners of fences, walls, and other barriers along property line is recommended. See Section 1.5.

Refer to Section 3.2 – Track Access and Safety for additional information pertaining to ROW access in preparation for construction activities.



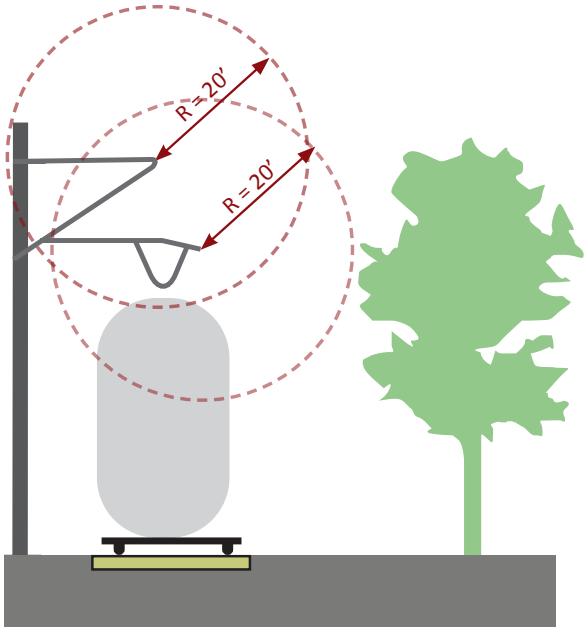
A minimum setback of five (5) feet between an adjacent structure and Metro ROW is strongly encouraged to allow project construction and ongoing maintenance without encroaching on Metro property.

1.4 Overhead Catenary System (OCS) Clearance

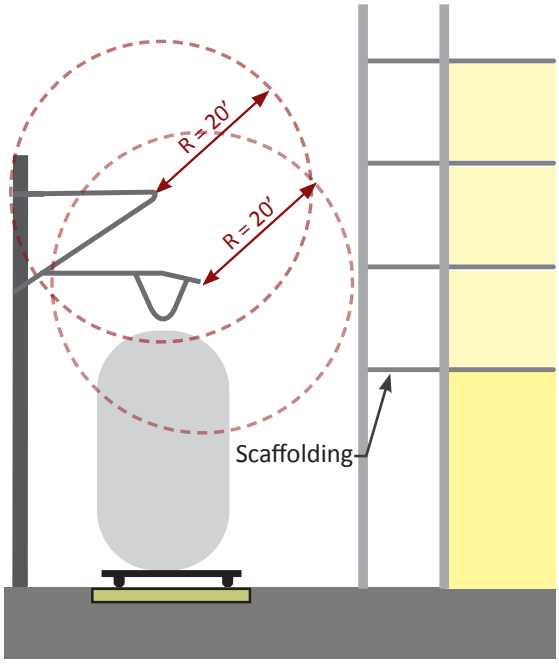
Landscaping and tree canopies can grow into the OCS above light rail lines, creating electrical safety hazards as well as visual and physical impediments for trains. Building appurtenances facing rail ROW, such as balconies, may also pose safety concerns to Metro operations as objects could fall onto the OCS.

RECOMMENDATION: Design project elements facing the ROW to avoid potential conflicts with Metro transit vehicles and infrastructure. Metro recommends that projects:

- Plan for landscape maintenance from private property and prevent growth into Metro ROW. Property owners will not be permitted to access Metro property to maintain private development.
- Design buildings such that balconies do not provide building users direct access to Metro ROW.
- Maintain building appurtenances and landscaping at a minimum distance of ten (10) feet from the OCS and support structures. If Transmission Power (TP) feeder cable is present, twenty (20) feet from the OCS and support structures is required. Different standards will apply for Metro Trolley Wires, Feeder Cables (wires) and Span Wires.



Adjacent structures and landscaping should be sited and maintained to avoid conflicts with the rail OCS.



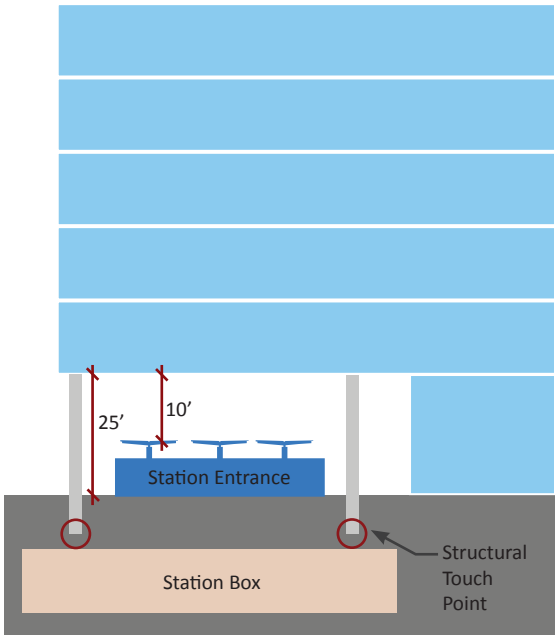
Scaffolding and construction equipment should be staged to avoid conflicts with the rail OCS.

1.5 Underground Station Portal Clearance

Metro encourages transit-oriented development. Where development is planned above station entrances, close coordination is needed for structural safety as well as access for patrons, operations, and maintenance. Below are key design rules of thumb for development planned to cantilever over an entrance to an underground Metro Rail station.

RECOMMENDATION:

1. Preserve 25 feet clearance at minimum from plaza grade and the building structure above.
2. Preserve 10 feet clearance at minimum between portal roof and building structure above.
3. Coordinate structural support system and touchdown points to ensure a safe transfer of the building loads above the station portal.
4. Coordinate placement of structural columns and amenities (e.g. signage, lighting, furnishings) at plaza level to facilitate direct and safe connections for people of all mobile abilities to and from station entrance(s).
5. Develop a maintenance plan for the plaza in coordination with Metro.



Projects that propose to cantilever over Metro subway portals require close coordination with Metro Engineering.

1.6 Shared Barrier Construction & Maintenance

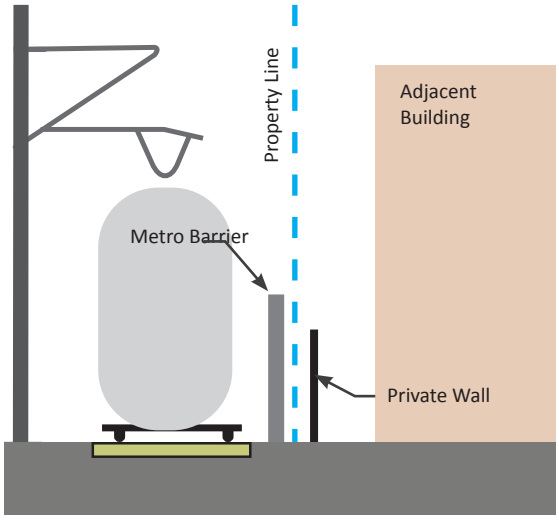
In areas where Metro ROW abuts private property, barrier construction and maintenance responsibilities can be a point of contention with property owners. When double barriers are constructed, the gap created between the Metro-constructed fence and a private property owner's fence can accumulate trash and make regular maintenance challenging without accessing the other party's property.

RECOMMENDATION: Coordinate with Metro Real Estate to create a single barrier condition along the ROW property line. With an understanding that existing conditions along ROW boundaries vary throughout LA County, Metro recommends the following, in order of preference:

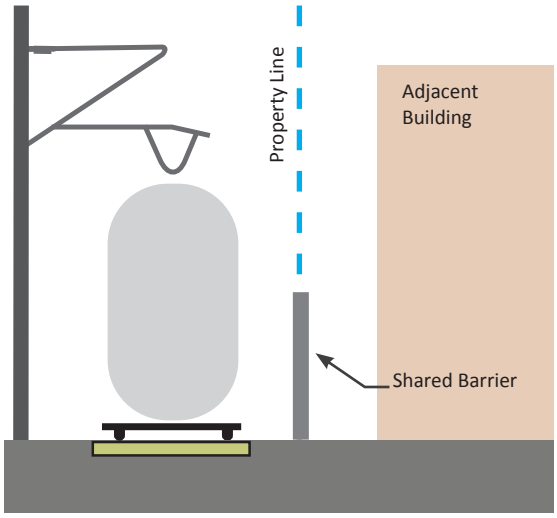
- **Enhance existing Metro barrier:** if structural capacity allows, private property owners and developers should consider physically affixing improvements onto and building upon Metro's existing barrier. Metro is amenable to barrier enhancements such as increasing barrier height and allowing private property owners to apply architectural finishes to their side of Metro's barrier.

- **Replace existing barrier(s):** if conditions are not desirable, remove and replace any existing barrier(s), including Metro's, with a new single "shared" barrier built on the property line.

Metro is amenable to sharing costs for certain improvements that allow for clarity in responsibilities and adequate ongoing maintenance from adjacent property owners without entering Metro's property. Metro Real Estate should be contacted with case-specific questions and will need to approve shared barrier design, shared financing, and construction.



Double barrier conditions allow trash accumulation and create maintenance challenges for Metro and adjacent property owners.



Metro prefers a single barrier condition along its ROW property line.

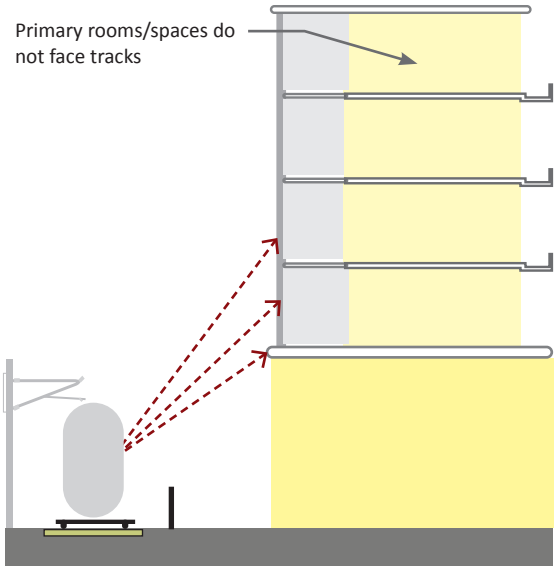
1.7 Project Orientation & Noise Mitigation

Metro may operate in and out of revenue service 24 hours per day, every day of the year, which can create noise and vibration (i.e. horns, power washing). Transit service and maintenance schedules cannot be altered to avoid noise for adjacent developments. However, noise and vibration impacts can be reduced through building design and orientation.

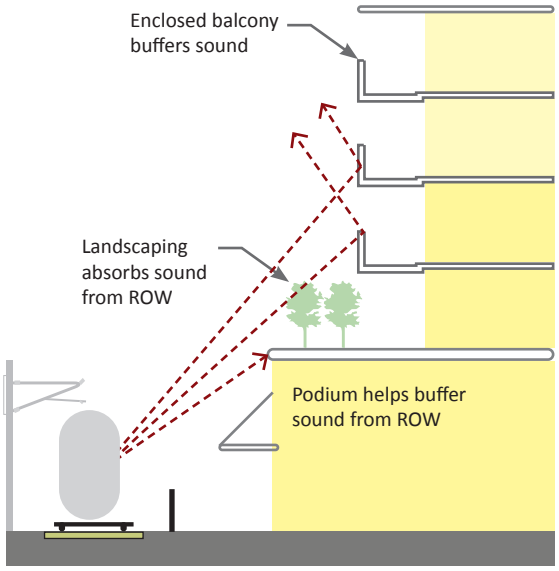
RECOMMENDATION: Use building orientation, programming, and design techniques to reduce noise and vibration for buildings along Metro ROW:

- Locate secondary or "back of house" rooms (e.g. bathrooms, stairways, laundry rooms) along ROW, rather than primary living spaces that are noise sensitive (e.g. bedrooms and family rooms).
- Use upper level setbacks and locate living spaces away from ROW.
- Enclose balconies.
- Install double-pane windows.
- Include language disclosing potential for noise, vibration, and other impacts due to transit proximity in terms and conditions for building lease or sale agreements to protect building owners/sellers from tenant/buyer complaints.

Developers are responsible for any noise mitigation required, which may include engineering designs for mitigation recommended by Metro or otherwise required by local municipalities. A recorded Noise Easement Deed in favor of Metro may be required for projects within 100 feet of Metro ROW to ensure notification to tenants and owners of any proximity issues.



Building orientation can be designed to face away from tracks, reducing the noise and vibration impacts.



Strategic placement of podiums and upper-level setbacks on developments near Metro ROW can reduce noise and vibration impacts.

1.8 At-Grade Rail Crossings

New development is likely to increase pedestrian activity at rail crossings. Safety enhancements may be needed to upgrade existing rail crossings to better protect pedestrians.

RECOMMENDATION: Coordinate with Metro, the California Public Utilities Commission (CPUC), and any other transit operators using the crossing (e.g. Metrolink) to determine if safety enhancements are needed for nearby rail crossings.

While Metro owns and operates the rail ROW, the CPUC regulates all rail crossings. Contact the CPUC early in the design process to determine if they will require any upgrades to existing rail crossings. The CPUC may request to review development plans and hold a site visit to understand future pedestrian activity. Metro's Corporate Safety Department can support the developer in coordination with the CPUC.

Gates and pedestrian arms are common types of safety elements for pedestrians at rail crossings.

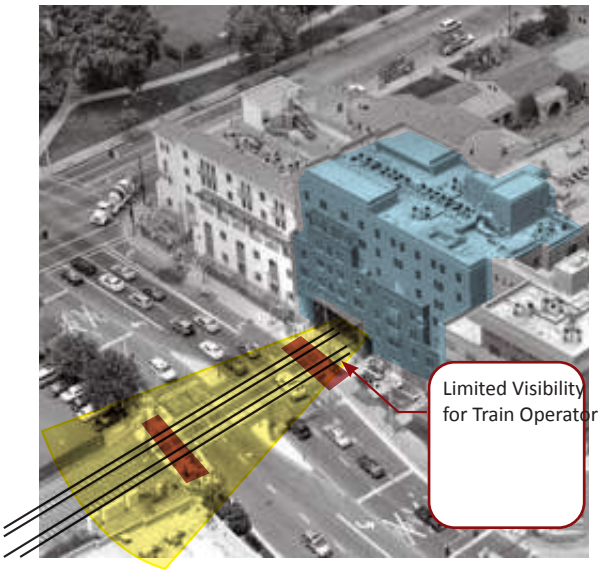
Safety elements of a gate and pedestrian arms have been constructed at the Monrovia Station.

1.9 Sight-Lines at Crossings

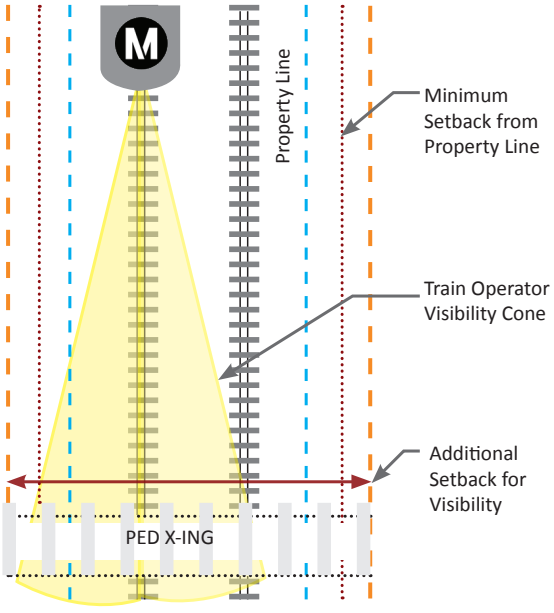
Developments adjacent to Metro ROW can present visual barriers to transit operators approaching vehicular and pedestrian crossings. Buildings and structures in close proximity to transit corridors can reduce sight-lines and create blind corners where operators cannot see pedestrians. This requires operations to reduce train speeds, which decreases efficiency of transit service.

RECOMMENDATION: Design buildings to maximize transit service sight-lines at crossings, leaving a clear cone of visibility to oncoming vehicles and pedestrians.

Metro Rail Operations will review, provide guidance, and determine the extent of operator visibility for safe operations. If the building envelope overlaps with the visibility cone near pedestrian and vehicular crossings, a building setback may be necessary to ensure safe transit service. The cone of visibility at crossings and required setback will be determined based on vehicle approach speed.



Limited sight-lines for trains approaching street crossings create unsafe conditions.



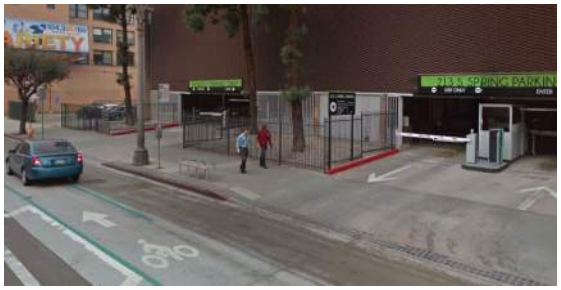
Visibility cones allow train operators to respond to safety hazards.

1.10 Driveway/Access Management

Driveways adjacent to on-street bus stops can create conflict for pedestrians walking to/from or waiting for transit. Additionally, driveways accessing parking lots and loading zones at project sites near Metro Rail and BRT crossings can create queuing issues along city streets and put vehicles in close proximity to fast moving trains and buses, which pose safety concerns.

RECOMMENDATION: Site driveways and other vehicular entrances to avoid conflicts with pedestrians, bicycles, and transit vehicles by:

- Placing driveways along side streets and alleys, away from on-street bus stops and transit crossings to minimize safety conflicts between active ROW, transit vehicles, and people, as well as queuing on streets.
- Locating vehicular driveways away from transit crossings or areas that are likely to be used as waiting areas for transit services.
- Placing loading docks away from sidewalks where transit bus stop activity is/will be present.
- Consolidating vehicular entrances and reduce width of driveways.
- Using speed tables to slow entering/exiting automobiles near pedestrians.
- Separating pedestrian walkways to minimize conflict with vehicles.
- Encouraging safe non-motorized travel.



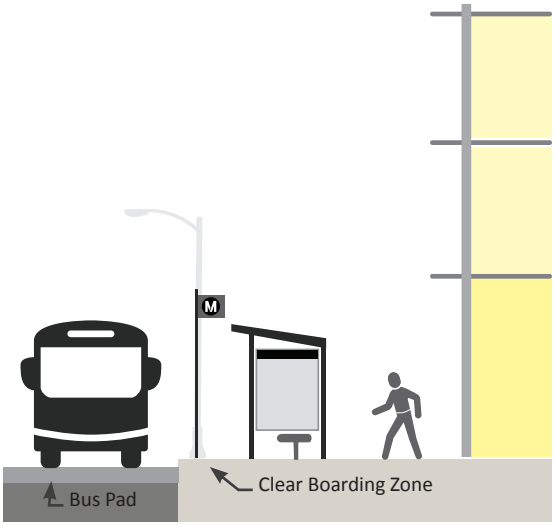
Driveways in close proximity to each other compromise safety for those walking to/from transit and increase the potential for vehicle-pedestrian conflicts.

1.11 Bus Stop & Zones Design

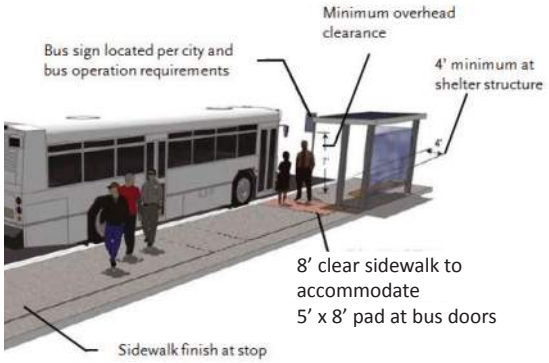
Metro Bus serves over 15,000 bus stops throughout the diverse landscape that is LA County. Typically located on sidewalks within public right-of-way owned and maintained by local jurisdictions, existing bus stop conditions vary from well-lit and sheltered spaces to uncomfortable and unwelcoming zones. Metro is interested in working with developers and local jurisdictions to create a vibrant public realm around new developments by strengthening multi-modal access to/ from Metro transit stops and enhancing the pedestrian experience.

RECOMMENDATION: When designing around existing or proposed bus stops:

- Review Metro's Transit Service Policy, which provides standards for design and operation of bus stops and zones for near-side, far-side, and mid-block stops.
- Review Metro's Transfers Design Guide for more information at https://www.metro.net/projects/station-design-projects/
- Accommodate 5' x 8' landing pads at bus doors (front and back door, which are typically 23 to 25 feet apart).
- Locate streetscape elements (e.g. tree planters, street lamps, benches, shelters, trash receptacles and newspaper stands) outside of bus door zones to protect transit access and ensure a clear path of travel.
- Install a concrete bus pad within each bus stop zone to avoid street asphalt damage.
- Replace stand-alone bus stop signs with bus shelters that include benches and adequate lighting.
- Design wide sidewalks (15' preferred) that accommodate bus landing pads as well as street furniture, landscape, and user travel space.
- Consider tree species, height, and canopy shape (higher than 14' preferred) to avoid vehicle conflicts at bus stops. Trees should be set back from the curb and adequately maintained to prevent visual and physical impediments for buses when trees reach maturity. Avoid planting of trees that have an invasive and shallow root system.



A concrete bus pad should be located at bus stops and bus shelters should be located along sidewalks to ensure an accessible path of travel to a clear boarding area.



Well-designed and accessible bus stops are beneficial amenities for both transit riders and users of adjacent developments.

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Engineering & Technical Review

Engineering & Technical Review

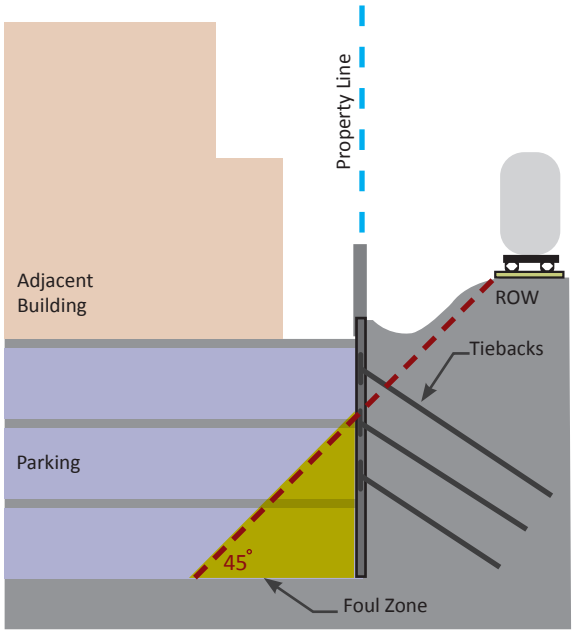
2.1 Excavation Support System Design

Excavation near Metro ROW has the potential to disturb adjoining soils and jeopardize support of existing Metro infrastructure. Any excavation which occurs within the geotechnical foul zone relative to Metro infrastructure is subject to Metro review and approval and meet Cal/OSHA requirements. This foul zone or geotechnical zone of influence shall be defined as the area below a track-way as measured from a 45-degree angle from the edge of the rail track ballast. Construction within this vulnerable area poses a potential risk to Metro service and requires additional Metro Engineering review.

RECOMMENDATION: Coordinate with Metro Engineering staff for review and approval of the excavation support system drawings and calculations prior to the start of excavation or construction. Tiebacks encroaching into Metro ROW may require a tieback easement or license, at Metro's discretion.

Any excavation/shoring within Metrolink operated and maintained ROW will require compliance with SCRRA Engineering standards and guidelines.

See page 7 for a sample section showing Metro adjacent conditions.



An underground structure located within the ROW foul zone would require additional review by Metro.

2.2 Proximity to Tunnels & Underground Infrastructure

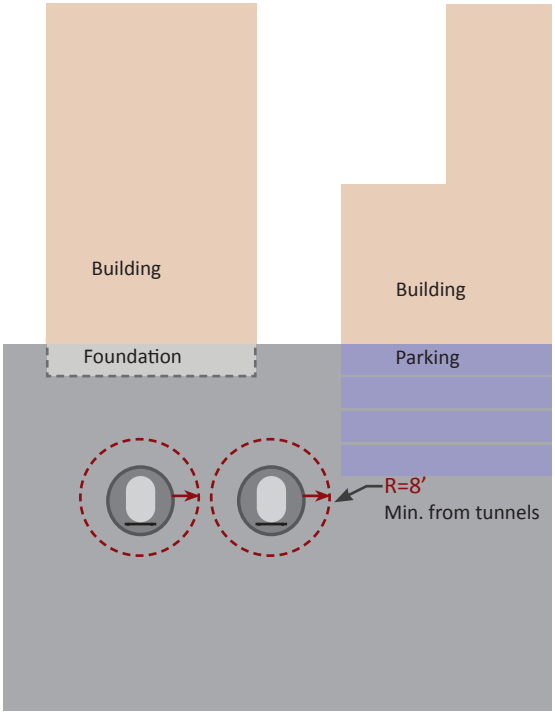
Construction adjacent to, over, or below underground Metro facilities (tunnels, stations and appendages) is of great concern and should be coordinated closely with Metro Engineering.

RECOMMENDATION: Coordinate with Metro early in the design process when proposing to build near underground Metro infrastructure. Metro typically seeks to maintain a minimum eight (8) foot clearance from existing Metro facilities to new construction (shoring or tiebacks). It will be incumbent upon the developer to demonstrate, to Metro's satisfaction, that both the temporary support of construction and the permanent works do not adversely affect the structural integrity, safety, or continued efficient operation of Metro facilities.

Dependent on the nature of the adjacent construction, Metro will need to review the geotechnical report, structural foundation plans, sections, shoring plan sections and calculations.

Metro may require monitoring where such work will either increase or decrease the existing overburden (i.e. weight) to which the tunnels or facilities are subjected. When required, the monitoring will serve as an early indication of excessive structural strain or movement. See Section 3.4, Excavation Drilling/Monitoring for additional information regarding monitoring requirements.

See page 7 for a sample section showing Metro adjacent conditions.

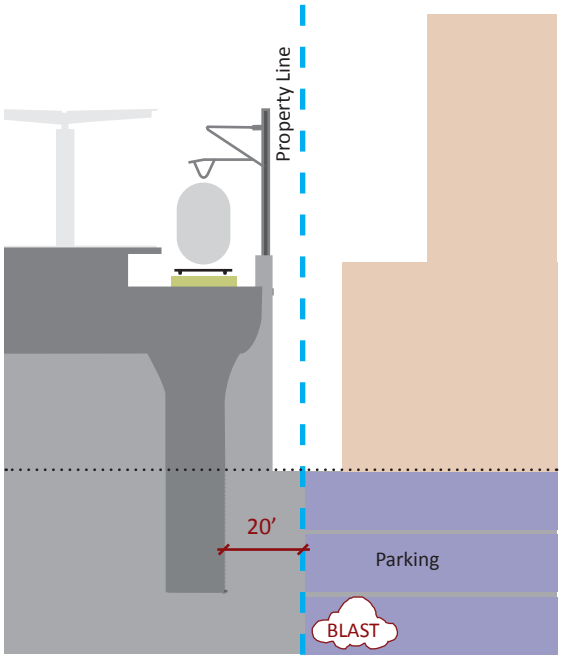


Adjacent project structures in close proximity to underground Metro infrastructure will require additional review by Metro.

2.3 Protection from Explosion/Blast

Metro is obligated to ensure the safety of public transit infrastructure from potential explosive sources which could originate from adjacent underground structures or from at-grade locations, situated below elevated guideways or near stations. Blast protection setbacks or mitigation may be required for large projects constructed near critical Metro facilities.

RECOMMENDATION: Avoid locating underground parking or basement structures within twenty (20) feet from an existing Metro tunnel or facility (exterior face of wall to exterior face of wall). Adjacent developments within this 20-foot envelope may be required to submit a Threat Assessment and Blast/Explosion Study for Metro review and approval.



An underground structure proposed within twenty (20) feet of a Metro structure may require a Threat Assessment and Blast/Explosion Study.

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Construction Safety & Management

Construction Safety & Management

3.1 Pre-Construction Coordination

Metro is concerned with impacts to service requiring rail single line tracking, line closures, speed restrictions, and bus bridging occurring as a result of adjacent project construction. Projects that will require work over, under, adjacent, or on Metro property or ROW and include operation of machinery, scaffolding, or any other potentially hazardous work are subject to evaluation in preparation for and during construction to maintain safe transit operations and passenger well-being.

RECOMMENDATION: Following an initial screening of the project, Metro may determine that additional on-site coordination may be necessary. Dependent on the nature of the adjacent construction, developers may be requested to perform the following as determined on a case-by-case basis:

- Submit a construction work plan and related project drawings and specifications for Metro review.
- Submit a contingency plan, show proof of insurance coverage, and issue current certificates.
- Provide documentation of contractor qualifications.
- Complete pre-construction surveys, perform baseline readings, and install movement instrumentation.
- Complete readiness review and perform practice run of transit service shutdown per contingency plan.
- Designate a ROW observer or other safety personnel and an inspector from the project's construction team.
- Establish a coordination process for access and work in or adjacent to ROW for the duration of construction.

Project teams will be responsible for the costs of adverse impacts to Metro transit operations caused by work on adjacent developments, including remedial work to repair damage to Metro property, facilities, or systems. Additionally, a Construction Monitoring fee may be assessed based on an estimate of required level of effort provided by Metro.

All projects adjacent to Metrolink infrastructure will require compliance with SCRRA Engineering Standards and Guidelines.

Metro may need to monitor development construction near Metro facilities.

3.2 Track Access and Safety

Permission from Metro is required to enter Metro property for rail construction and maintenance along, above, or under Metro ROW as these activities can interfere with Metro utilities and service and pose a safety hazard to construction teams and transit riders. Track access is solely at Metro's discretion and is discouraged to prevent electrocution and collisions with construction workers or machines.

RECOMMENDATION: Obtain and/or complete the following to work in or adjacent to Metro Rail ROW:

1. **Construction Work Plan:** Dependent on the nature of adjacent construction, Metro may request a construction work plan, which describes means and methods and other construction plan details, to ensure the safety of transit operators and riders.

2. **Safety Training:** All members of the project construction team will be required to attend Metro Rail Safety Training before commencing work activity. Training provides resources and procedures when working near active rail ROW.

3. **Right of Entry Permit/Temporary Construction Easement:** All access to and activity on Metro property, including easements necessary for construction of adjacent projects, must be approved through a Right-of-Entry Permit and/or a Temporary Construction Easement obtained from Metro Real Estate and may require a fee.

4. **Track Allocation:** All work on Metro Rail ROW must receive prior approval from Metro Rail Operations Control. Track Allocation identifies, reserves, and requests changes to normal operations for a specific track section, line, station, location, or piece of equipment to allow for safe use by a non-Metro entity. If adjacent construction is planned in close proximity to active ROW, flaggers must be used to ensure safety of construction workers and transit riders.

Trained flaggers ensure the safe crossing of pedestrians and workers of an adjacent development.

3.3 Construction Hours

Building near active Metro ROW poses safety concerns and may require limiting hours of construction which impact Metro ROW to night or off-peak hours so as not to interfere with Metro revenue service. To maintain public safety and access for Metro riders, construction should be planned, scheduled, and carried out in a way to avoid impacts to Metro service and maintenance.

RECOMMENDATION: In addition to receiving necessary construction approvals from the local jurisdiction, all construction work on or in close proximity to Metro ROW must be scheduled through the Track Allocation Process, detailed in Section 3.2.

Metro prefers that adjacent construction with potential to impact normal, continuous Metro operations take place during non-revenue hours (approximately 1am-4am) or during non-peak hours to minimize impacts to service. The developer may be responsible for additional operating costs resulting from disruption to normal Metro service.

Construction during approved hours ensures the steady progress of adjacent development construction and minimizes impacts to Metro's transit service.

3.4 Excavation/Drilling Monitoring

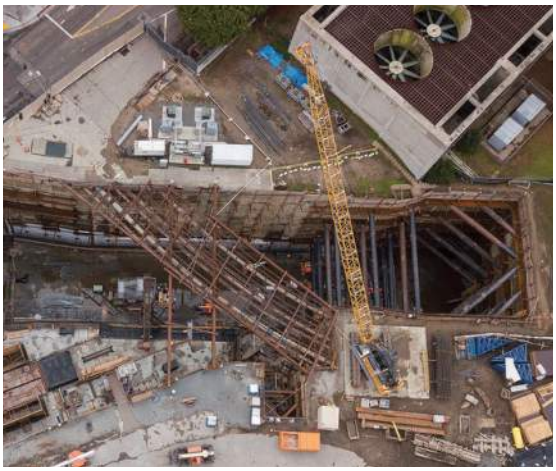
Excavation is among the most hazardous construction activities and can pose threats to the structural integrity of Metro's transit infrastructure.

RECOMMENDATION: Coordinate with Metro Engineering to review and approve excavation and shoring plans during design and development, and well in advance of construction (see Sections 2.1 and 2.2).

Geotechnical instrumentation and monitoring will be required for all excavations occurring within Metro's geotechnical zone of influence, where there is potential for adversely affecting the safe and efficient operation of transit vehicles. Monitoring of Metro facilities due to adjacent construction may include the following as determined on a case-by-case basis:

- Pre- and post-construction condition surveys
- Extensometers
- Inclinometers
- Settlement reference points
- Tilt-meters
- Groundwater observation wells
- Movement arrays
- Vibration monitoring

Excavation and shoring plans must be reviewed by Metro to ensure structural compatibility with Metro infrastructure and safety during adjacent development construction.



A soldier pile wall used for Regional Connector station at 2nd/Hope.

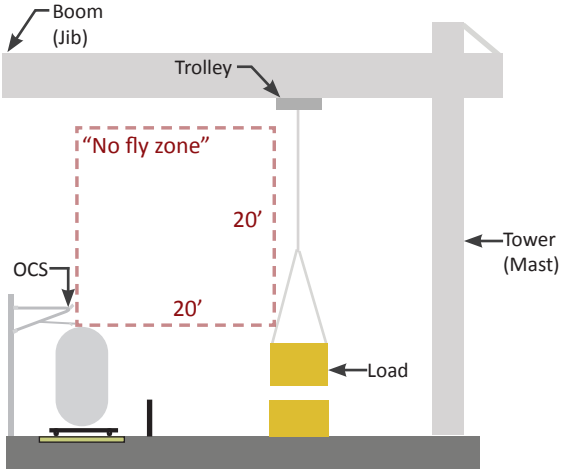
3.5 Crane Operations

Construction activities adjacent to Metro ROW may require moving large, heavy loads of building materials and machinery using cranes. Cranes referenced here include all power-operated equipment that can hoist, lower, and horizontally move a suspended load. To ensure safety for Metro riders, operators, and transit facilities, crane operations adjacent to Metro ROW must follow the safety regulations and precautions below and are subject to California Occupational Safety and Health Administration (Cal/OSHA) standards.

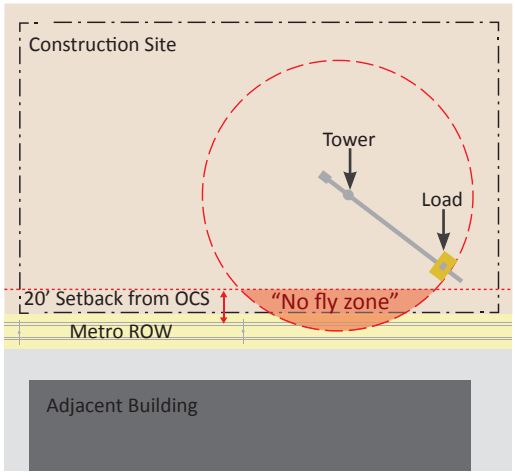
RECOMMENDATION:
Coordinate with Metro to discuss construction methods and confirm if a crane work plan is required. Generally, crane safety near Metro's ROW and facilities largely depends on the following factors: 1) Metro's operational hours and 2) swinging a load over or near Metro power lines and facilities. Note:

1. Clearance: A crane boom may travel over energized Metro OCS only if it maintains a vertical 20-foot clearance and the load maintain a horizontal 20-foot clearance.
2. Power: Swinging a crane boom with a load over Metro facilities or passenger areas is strictly prohibited during revenue hours. To swing a load in the "no fly zone" (see diagrams to right), the construction team must coordinate with Metro to de-energize the OCS.
3. Weathervaning: When not in use, the crane boom may swing 360 degrees with the movement of the wind, including over energized Metro OCS, only if the trolley is fully retracted towards the crane tower and not carrying any loads.
4. Process: Developers and contractors must attend Metro Track Allocation (detailed in Section 3.2) to determine if Metro staff support is necessary during crane erection and load movement.
5. Permit: Developers must apply for a Metro Right-of-Entry permit to swing over Metro facilities.

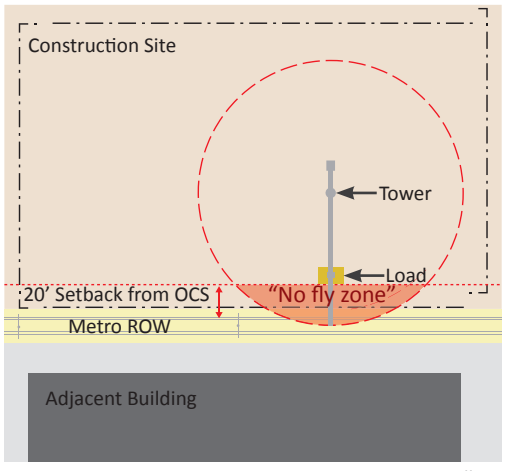
Project teams will bear all costs associated with impacts to Metro Rail operations and maintenance.



Cranes and construction equipment should be staged to avoid conflicts with the rail OCS.



Plan View: Crane swing and load are restricted near Metro ROW.



Plan View: While crane boom swings over "no fly zone," the trolley and load are retracted to maintain clearance from OCS.

3.6 Construction Barriers & Overhead Protection

During construction, falling objects can damage Metro facilities and pose a safety concern to the riders accessing them.

RECOMMENDATION: Erect vertical construction barriers and overhead protection compliant with Metro and Cal/OSHA requirements to prevent objects from falling into Metro ROW or areas designed for public access to Metro facilities. A protection barrier shall be constructed to cover the full height of an adjacent project and overhead protection from falling objects shall be provided over Metro ROW as necessary. Erection of the construction barriers and overhead protection for these areas shall be done during Metro non-revenue hours.

Overhead protection is required when moving heavy objects over Metro ROW or in areas designated for public use.

Constructed above is a wooden box over the entrance portal for overhead protection at the 4th/Hill Station.

3.7 Pedestrian & Emergency Access

Metro's riders rely on the consistency and reliability of access and wayfinding to and from stations, stops, and facilities. Construction on adjacent property must not obstruct pedestrian access, fire department access, emergency egress, or otherwise present a safety hazard to Metro operations, its employees, riders, and the general public. Fire access and safe escape routes within all Metro stations, stops, and facilities must be maintained at all times.

Sidewalk access is blocked for a construction project, forcing pedestrians into the street or to use less direct paths to the Metro facility.

RECOMMENDATION: Ensure pedestrian and emergency access from Metro stations, stops, and transit facilities is compliant with the Americans with Disabilities Act (ADA) and maintained during construction:

- Temporary fences, barricades, and lighting should be installed and watchmen provided for the protection of public travel, the construction site, adjacent public spaces, and existing Metro facilities.
- Temporary signage should be installed where necessary and in compliance with the latest California Manual on Uniform Traffic Control Devices (MUTCD) and in coordination with Metro Art and Design Standards.
- Emergency exits shall be provided and be clear of obstructions at all times.
- Access shall be maintained for utilities such as fire hydrants, stand pipes/connections, and fire alarm boxes as well as Metro-specific infrastructure such as fan and vent shafts.

3.8 Impacts to Bus Routes & Stops

During construction, bus stop zones and routes may need to be temporarily relocated. Metro needs to be informed of activities that require stop relocation or route adjustments in order to ensure uninterrupted service.

RECOMMENDATION: During construction, maintain or relocate existing bus stops consistent with the needs of Metro Bus Operations. Design of temporary and permanent bus stops and surrounding sidewalk areas must be compliant with the ADA and allow passengers with disabilities a clear path of travel to the transit service. Existing bus stops must be maintained as part of the final project. Metro Bus Operations Control Special Events Department and Metro Stops & Zones Department should be contacted at least 30 days before initiating construction activities.

Temporary and permanent relocation of bus stops and layover zones will require coordination between developers, Metro, and other municipal bus operators and local jurisdictions.

3.9 Utility Coordination

Construction has the potential to interrupt utilities that Metro relies on for safe operations and maintenance. Utilities of concern to Metro include, but are not limited to, condenser water piping, potable/fire water, storm and sanitary sewer lines, and electrical/ telecommunication services.

RECOMMENDATION: Coordinate with Metro Real Estate during project design to gauge temporary and permanent utility impacts and avoid conflicts during construction.

The contractor shall protect existing above-ground and underground Metro utilities during construction and coordinate with Metro to receive written approval for any utilities pertinent to Metro facilities that may be used, interrupted, or disturbed.

When electrical power outages or support functions are required, approval must be obtained through Metro Track Allocation in coordination with Metro Real Estate for a Right of Entry Permit.

To begin coordination with Metro Real Estate, visit www.metro.net/devreview and select the drop-down "Utility Project Coordination."

Coordination of underground utilities is critical to safely and efficiently operate Metro service.

3.10 Air Quality & Ventilation Protection

Hot or foul air, fumes, smoke, steam, and dust from adjacent construction activities can negatively impact Metro facilities, service, and users.

RECOMMENDATION: Ensure that hot or foul air, fumes, smoke, and steam from adjacent facilities are discharged beyond 40 feet from existing Metro facilities, including but not limited to ventilation system intake shafts and station entrances. Should fumes be discharged within 40 feet of Metro intake shafts, a protection panel around each shaft shall be required.

A worker breaks up concrete creating a cloud of silica dust.

Glossary

Cone of Visibility
A conical space at the front of moving transit vehicles allowing for clear visibility of travel way and/or conflicts.

Construction Work Plan (CWP)
Project management document outlining the definition of work tasks, choice of technology, estimation of required resources and duration of individual tasks, and identification of interactions among the different work tasks.

Flagger/Flagman
Person who controls traffic on and through a construction project. Flaggers must be trained and certified by Metro Rail Operations prior to any work commencing in or adjacent to Metro ROW.

Geotechnical Foul Zone
Area below a track-way as measured from a 45-degree angle from the edge of the rail track ballast.

Guideway
A channel, track, or structure along which a transit vehicle moves.

Heavy Rail Transit (HRT)
Metro HRT systems include exclusive ROW (mostly subway) trains up to six (6) cars long (450') and utilize a contact rail for traction power distribution (e.g. Metro Red Line).

Joint Development (JD)
JD is the asset management and real estate development program through which Metro collaborates with developers to build housing, retail, and other amenities on Metro properties near transit, typically through ground lease. JD projects directly link transit riders with destinations and services throughout LA County.

Light Rail Transit (LRT)
Metro LRT systems include exclusive, semi-exclusive, or street ROW trains up to three (3) cars long (270') and utilize OCS for traction power distribution (e.g. Metro Blue Line).

Measure R
Half-cent sales tax for LA County approved in November 2008 to finance new transportation projects and programs. The tax expires in 2039.

Measure M
Half-cent sales tax for LA County approved in November 2016 to fund transportation improvements, operations and programs, and accelerate projects already in the pipeline. The tax will increase to one percent in 2039 when Measure R expires.

Metrolink
A commuter rail system with seven lines throughout Los Angeles, Orange, Riverside, San Bernardino, Ventura, and North San Diego counties governed by the Southern California Regional Rail Authority (SCRRA).

Metro Adjacent Construction Design Manual
Volume III of the Metro Design Criteria & Standards, which outlines the Metro adjacent review procedure as well as operational requirements when constructing over, under, or adjacent to Metro facilities, structures, and property.

Metro Bus
Metro "Local" and "Rapid" bus service runs within the street, typically alongside vehicular traffic, though occasionally in "bus-only" lanes.

Metro Bus Rapid Transit (BRT)
High quality bus service that provides faster and convenient service through the use of dedicated ROW, branded vehicles and stations, high frequency and intelligent transportation systems, all-door boarding, and intersection crossing priority. Metro BRT may run within dedicated ROW or in mixed flow traffic on streets.

Metro Design Criteria and Standards
A compilation of documents that govern how Metro transit service and facilities are designed, constructed, operated, and maintained.

Metro Rail
Urban rail system serving LA County consisting of six lines, including two subway lines and four light rail lines.

Metro Rail Design Criteria (MRDC)
Volume IV of the Metro Design Criteria & Standards which establishes design criteria for preliminary engineering and final design of a Metro Rail Project.

Metro Transit Oriented Communities
Land use planning and community development program that seeks to maximize access to transportation as a key organizing principle and promote equity and sustainable living by offering a mix of uses close to transit to support households at all income levels, as well as building densities, parking policies, urban design elements, and first/last mile facilities that support ridership and reduce auto dependency.

Noise Easement Deed
Easement granted by property owners abutting Metro ROW acknowledging noise due to transit operations and maintenance.

Overhead Catenary System (OCS)
One or more electrified wires situated over a transit ROW that transmit power to light rail trains via pantograph, a current collector mounted on the roof of an electric vehicle. Metro OCS is supported by hollow poles placed between tracks or on the outer edge of parallel tracks.

Right of Entry Permit
Written approval granted by Metro Real Estate to enter Metro ROW and property.

Right of Way (ROW)
Legal right over property reserved for transportation purposes to construct, protect, maintain and operate transit services.

Southern California Regional Rail Authority (SCRRA)
A joint powers authority made up of an 11-member board representing the transportation commissions of Los Angeles, Orange, Riverside, San Bernardino and Ventura counties. SCRRA governs and operates Metrolink service.

Threat Assessment and Blast/Explosion Study
Analysis performed when adjacent developments are proposed within twenty (20) feet from an existing Metro tunnel or facility.

Track Allocation/Work Permit
Permit granted by Metro Rail Operations Control to allocate a section of track and perform work on or adjacent to Metro Rail ROW. This permit should be submitted for any work that could potentially foul the envelope of a train.

Wayfinding
Signs, maps, and other graphic or audible methods used to convey location and directions to travelers.

metro.net/projects/devreview/

Metro

Letter No. A7

Shine Ling, AICP, Senior Manager
Development Review Team
Transit Oriented Communities
Metro Development Review
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, MS 99-22-1
Los Angeles, CA 90012

Response to Comment No. A7-1

The comment briefly summarizes the Los Angeles County Metropolitan Transportation Authority's (Metro) commitment to working with local municipalities, developers, and stakeholders on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. The comment also describes Metro's statutory responsibly related to Metro-owned right-of-way (ROW). Metro also attaches the Metro Adjacent Development Handbook, which provides an overview of common concerns for development adjacent to Metro-owned ROW and transit facilities.

The comment also briefly summarizes the Project description. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A7-2

The comment identifies the statutory responsibilities of Metro as a Responsible Agency under CEQA, particularly as related to the approval of a license agreement for the proposed Class I multi-purpose path along Railroad Avenue and the 13th Street crossing improvements. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A7-3

This comment advises the Project Applicant regarding rail operations in the railroad ROW. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. A7-4

The Draft EIR analyzed all environmental impacts pursuant to CEQA and incorporated all feasible mitigation measures. The Draft EIR addressed traffic in Section 4.14, Transportation, of the Draft EIR, with supporting data provided in Appendix L of the Draft EIR. The Applicant will comply with all applicable requirements for construction and operation adjacent to the Southern California Regional Rail Authority (SCRRA) Metrolink ROW. Through the building permit process, the Project will continue consultation with Metro prior to construction within 100 feet of Metro-owned ROW, including the Class I multi-purpose path along the north side of 13th Street. Through consultation, the Project will demonstrate consistency with Metro's Adjacent Development Handbook and Metro's Adjacent Construction Design Manual.

Response to Comment No. A7-5

As discussed in Response to Comment No. A7-4 above, the Applicant will comply with all applicable requirements for construction and operation adjacent to the SCRRA Metrolink ROW. Through the building permit process, the Project will continue consultation with Metro prior to construction within 100 feet of Metro-owned ROW, including the Project perimeter wall, landscape, Class I multi-purpose trail along the north side of 13th Street, and underground storm drains and utilities.

Response to Comment No. A7-6

As discussed in Response to Comment No. A7-4 above, the Applicant will comply with all applicable requirements for construction and operation adjacent to the SCRRA Metrolink ROW. Through the building permit process, the Project will continue consultation with Metro prior to construction within 100 feet of Metro-owned ROW, including the Class I multi-purpose path along the north side of 13th Street.

Response to Comment No. A7-7

As discussed in Response to Comment No. A7-4 above, the Applicant will comply with all applicable requirements for construction and operation adjacent to the SCRRA Metrolink ROW, including construction equipment placement, setbacks, access, and construction monitoring. Through the building permit process and on-going consultation with Metro, the Project will demonstrate consistency with Metro's Adjacent Development Handbook and Metro's Adjacent Construction Design Manual.

Response to Comment No. A7-8

The 13th Street crossing configuration has had several diagnostic meetings with the CPUC, roadway authority, Metro, and associated railroads in 2019 and 2022, and the projected future volumes have been shared with the roadway authority, associated railroads, and CPUC. The design introduced queuing prevention measures, including a pre-signal for westbound 13th Street, interconnection with the railroad, and queue loops for eastbound 13th Street. Comments from the CPUC and diagnostic team have been included and addressed in the design accordingly.

Response to Comment No. A7-9

As discussed in Response to Comment No. A7-4 above, the Applicant will comply with all applicable requirements for construction and operation adjacent to the SCRRA Metrolink ROW, including Occupational Safety and Health Administration (OSHA) requirements, during construction and/or excavation activities in proximity to Metro-owned ROW. The commenter's advisories regarding technical review and costs of impacts are noted. However, the Project would not require noise mitigation, and, as such, there would be no cost related to such mitigation.

Response to Comment No. A7-10

The comment recommends that the Applicant review the Transit Supportive Planning Toolkit to reduce vehicle miles traveled (VMT). The Project includes features that support transit and reduce VMT, such as its location near public transit, diverse mix of land uses (including Old Town Newhall), provision of new sidewalks along the Project frontage, provision of bicycle amenities (e.g. long- and short-term parking), and provision of a Class I multi-purpose path. In addition,

Project Design Feature PDF-TA-1, which is described on page 4.14-12 in the Draft EIR, would further reduce the Project's VMT and encourage transit use by incorporating several Transportation Demand Measures (TDM) into the Project, including the features that have been identified above, as well as flexible work schedules and telecommuting programs, carpool programs, flex car support, and preferential parking locations for high-occupancy vehicles. The Applicant will review and take into consideration recommendations of the toolkit prior to final building design.

Response to Comment No. A7-11

The comment recommends that the Applicant implement a range of specific features related to transit connections and access, walkability, bicycle use and micro-mobility devices, and first/last mile access. The Project would be developed approximately 2,500 feet north of the Jan Heidt Newhall Metrolink Station, which is an intermodal hub that, in addition to providing access to the Metrolink passenger rail system, is served by (1) Santa Clarita Transit (SCT) local lines, which connect the Newhall community to other parts of the City, including Bouquet Canyon, Plum Canyon, and Canyon Country, as well as to the McBean Regional Transit Center and the Santa Clarita (Soledad) Metrolink Station; (2) SCT commuter express lines, which connect Santa Clarita to North Hollywood and the Metro B and G Lines; Woodland Hills, Canoga Park, and Chatsworth; UCLA, Westwood, and Century City; and Union Station and Downtown Los Angeles; (3) Amtrak Thruway buses, which offer a connection between the Jan Heidt Newhall Metrolink Station and the Amtrak Bakersfield Station, a transfer point to and from the San Joaquins trains to Oakland and Sacramento; and (4) the Antelope Valley Transit Authority (AVTA) North County TRANSporter, which travels between the Palmdale Transportation Center and the Jan Heidt Newhall Metrolink Station, connecting Antelope Valley residents to the Santa Clarita Valley. Accordingly, the Project's location near multiple public transit options would improve mobility, accessibility, reliability, and travel safety for Project employees. In addition, the Project would provide dedicated pedestrian access to the Project Site via new sidewalks along the Project frontage and internal to the Project Site. Pedestrian access would be provided at all three driveways and would be concentrated at the signalized intersection. Pedestrian paths of travel would be routed away from vehicle traffic to the extent possible. Most pedestrian trips would either be internal trips within the Project Site or trips between Project uses and the Jan Heidt Newhall Metrolink Station or nearby commercial businesses. The vast majority of pedestrians traveling to or from the Project Site are not expected to walk across uncontrolled Project vehicular access points. Instead, pedestrian trips are concentrated at new signalized intersection and crosswalks and internal sidewalks.

The Project would also promote the use of bicycles by constructing a Class I multi-purpose path along the Project frontage at 12th Street, Arch Street, and 13th Street. In addition, the Project would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to provide a link for pedestrians and bicyclists between the Project Site and the Jan Heidt Newhall Metrolink Station and the Old Town Newhall dining and entertainment district. The Project would also provide 170 bicycle parking spaces (145 long-term spaces and 25 short-term spaces).

These Project features provide first/last mile connections inclusive of all modes of transportation.

Response to Comment No. A7-12

In conformance with the City's Uniform Development Code, the Project would be required to provide 2,969 parking spaces. However, the Project would provide a reduced number of 2,684 parking spaces as allowed under the Jobs Creation Overlay Zone that would be extended to the Project Site as part of the Project's entitlements.

LETTER A8

SCV WATER

WATER RESOURCES 26501 Summit Circle, Santa Clarita, CA 91350-3049

(661) 297-1600 | yourSCVwater.com

May 1, 2023

City of Santa Clarita Planning Division
Attn: Erika Iverson, Senior Planner
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

RE: Response to Notice of Availability of a Draft Environmental Impact Report for the proposed Shadowbox Studios Project, (Master Case 21-109)

Dear Ms. Iverson:

Thank you for the opportunity to comment on the Notice of Availability (NOA) for the Draft Environmental Impact Report (DEIR) for the proposed Shadowbox Studios Project (Project). The Santa Clarita Valley Water Agency (SCV Water) submits the following comments for consideration.

In Section 4.9 of the DEIR the developer states that the potential for significant impacts in the depletion of groundwater supplies or interference with groundwater recharge are less than significant and that no mitigation measures are required.

As the Project would significantly increase the amount of impervious surface area over a known groundwater recharge area, SCV Water believes that the reduction of percolated rainwater could reduce the amount of water reaching the groundwater basin. A8-1

SCV Water recommends that to the extent possible, impervious surfaces throughout the Project be made permeable through the use of alternate methods of paving as to not reduce the volume of water reaching the groundwater basin. The percolation of water into the local groundwater basins provides a vital water resource to the Santa Clarita Valley.

SCV Water requests the City have the developer explore additional solutions that increase the permeability of the Projects paved surfaces.

SCV Water appreciates your consideration of these comments.

Very truly yours,

Rick Vasilopulos
Santa Clarita Valley Water Agency

Cc: Stephen L. Cole – Assistant General Manager

Letter No. A8
Rick Vasilopulos
Santa Clarita Valley Water Agency
26501 Summit Circle
Santa Clarita, CA 91350

Response to Comment No. A8-1

As described on page 4.9-16 in Section 4.9, Hydrology and Water Quality, of the Draft EIR, the Project would incorporate an infiltration and drainage basin, multiple catch basins, and landscape designed to minimize or eliminate runoff. On-site runoff from the Project Site would be captured in a closed pipe system and conveyed to Placerita Creek, a soft-bottom drainage channel that allows for percolation of surface water. Moreover, prior to discharging into Placerita Creek, the first-flush runoff would be routed through the underground infiltration chambers or infiltration/drainage basin proposed for the Project. Additionally, a portion of the off-site stormwater, during peak storm events, would be routed to the infiltration/drainage basin. The Project's proposed drainage/infiltration system would capture the first ¾ inch of rainfall from each storm event and use infiltration chambers/basin to infiltrate this rainfall back into the earth. Given this proposed system, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The Project would not impede sustainable groundwater management of the basin. Impacts in this regard are less than significant.

LETTER O1

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Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

April 17, 2023

Erika Iverson, Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
Em: Eiverson@santa-clarita.com

RE: City of Santa Clarita's Shadowbox Studios Project (Master Case 21-109) SCH# 2022030762

Dear Erika Iverson,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments for the City of Santa Clarita's ("**City**") April 18, 2023 Planning Commission Meeting for the Shadowbox Studios Project ("**Project**").

The Southwest Carpenters is a labor union representing over 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

O1-1

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of

O1-2

the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

O1-2 Continued

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

O1-3

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

O1-4

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

O1-4
Continued

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

O1-4
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Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

construction sites have been identified as sources of community spread of COVID-19.[5]

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.

O1-4
Continued

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

O1-4
Continued

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

O1-4
Continued

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

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[6] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

[7] For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

The City should require the Project to be built using a workforce trained in ICRA protocols.

Sincerely,

Jason A. Cohen
Attorneys for Southwest Mountain States
Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

O1-4
Continued

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
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Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

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The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

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Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin

Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

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[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

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Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

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Continued

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
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San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Mininum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4103	1.4103
2	**12-1-2021**	**2-28-2022**	1.3613	1.3613
3	**3-1-2022**	**5-31-2022**	1.1985	1.1985
4	**6-1-2022**	**8-31-2022**	1.1921	1.1921
5	**9-1-2022**	**11-30-2022**	1.1918	1.1918
6	**12-1-2022**	**2-28-2023**	1.0774	1.0774
7	**3-1-2023**	**5-31-2023**	1.0320	1.0320
8	**6-1-2023**	**8-31-2023**	1.0260	1.0260

9	**9-1-2023**	**11-30-2023**	1.0265	1.0265
10	**12-1-2023**	**2-29-2024**	2.8857	2.8857
11	**3-1-2024**	**5-31-2024**	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4091	1.4091
2	**12-1-2021**	**2-28-2022**	1.3329	1.3329
3	**3-1-2022**	**5-31-2022**	1.1499	1.1499
4	**6-1-2022**	**8-31-2022**	1.1457	1.1457
5	**9-1-2022**	**11-30-2022**	1.1415	1.1415
6	**12-1-2022**	**2-28-2023**	1.0278	1.0278
7	**3-1-2023**	**5-31-2023**	0.9868	0.9868
8	**6-1-2023**	**8-31-2023**	0.9831	0.9831

9	**9-1-2023**	**11-30-2023**	0.9798	0.9798
10	**12-1-2023**	**2-29-2024**	2.8757	2.8757
11	**3-1-2024**	**5-31-2024**	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

LETTER O1 Continued

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

Letter No. O1
Jason A. Cohen
Southwest Mountain States Regional Council of Carpenters
c/o Mitchell M. Tsai
139 South Hudson Avenue, Suite 200
Pasadena, CA 91101

Response to Comment No. O1-1

The comment provides an introduction to the Southwest Regional Council of Carpenters (SWRCC) and submits comments for the City of Santa Clarita Planning Commission Meeting on April 18, 2023. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no response is warranted.

Response to Comment No. O1-2

The comment states that SWRCC reserves the right to supplement the comments during the review of the Final EIR for the Project and at the public hearings. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no response is warranted.

Response to Comment No. O1-3

The City will continue to send the SWRCC notices related to the Project. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O1-4

The comment provides research and opinions regarding the potential for the use of a local construction workforce to reduce greenhouse gas and air pollutant emissions as a result of reduced vehicle miles traveled by construction workers. Such research and opinions are noted. As concluded in the Draft EIR, the Project would not result in significant impacts related to greenhouse gas emissions or air quality. The comment also discusses the use of a local workforce and the City's imposition of training requirements during Project construction to prevent the spread of COVID-19 and other infectious diseases. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O1-5

The comment presents a draft technical report regarding local hire requirements and considerations for GHG modeling. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted. As noted in the prior response, the EIR concluded that the Project would not result in significant impacts related to greenhouse gas emissions or air quality.

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LETTER O2

ADAMS BROADWELL JOSEPH & CARDOZO
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Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 12, 2023

VIA EMAIL AND OVERNIGHT MAIL

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
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mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents

Dear Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to respectfully request that the City of Santa Clarita ("City") extend by at least 30 days the public review and comment period for the Draft Environmental Impact Report ("DEIR") prepared for the Shadowbox Studios Project (Master Case 21-109) ("Project"), which currently ends on May 22, 2023.

O2-1

We are requesting an extension due to the City's failure to provide timely access to all documents referenced in the DEIR. We ask that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its

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air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18. **O2-1 Continued**

On April 27, 2023, our office submitted a request, pursuant to the California Environmental Quality Act ("CEQA"),[1] for immediate access to any and all *documents referenced or relied upon in the Draft Environmental Impact Report*, excluding the DEIR, its appendices and documents available on the City of Santa Clarita website as of that date.[2] CEQA's section 21092(b)(1) and CEQA Guidelines section 15087(c)(5) require that "all documents referenced" and "all documents incorporated by reference" in an environmental impact report shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[3]

On May 8, 2023, the City responded that it was "in receipt of your public records request," and that because the request involved numerous separate and distinct records, the City claimed an extension pursuant to Government Code section 7922.535(b) to provide the missing documents. The City stated that "pursuant to the extension provision, you will be contacted on or before May 22, 2023, with the availability of the records responsive and appropriate for disclosure." **O2-2**

As an initial matter, our April 27, 2023 request was made pursuant to the provisions of CEQA, not the California Public Records Act.[4] Therefore, the extension provision cited by the City (Government Code section 7922.535(b)) is inapplicable.

Moreover, CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[5] The courts have held that the failure to provide even a few pages

[1] Pub. Resources Code §§ 21000 *et seq*.
[2] Letter to Jason Crawford and Erika Iverson, City of Santa Clarita from Sheila Sannadan, Adams Broadwell Joseph & Cardozo re: Request for Immediate Access to Documents Referenced in the Draft Environmental Impact Report – Shadowbox Studios Project (Master Case 21-109) (April 27, 2023).
[3] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5).
[4] Government Code §§ 7920.000, *et seq*.
[5] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[6] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[7]

By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City is depriving members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project and is violating the procedural mandates of CEQA. The City's suggestion that it will not make documents referenced in the DEIR available for our review until May 22, 2023—the last day to submit comments on the Project—plainly violates CEQA and would preclude any meaningful public review and comment. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR by at least 30 days from the date on which the City releases ***all*** the DEIR reference documents for public review.

O2-2
Continued

Given the short time before the current public review and comment period ends, please contact me as soon as possible with your response to this request, but no later than close of business on **Monday, May 15, 2023**. Thank you for your consideration and prompt response to this request.

Sincerely,

Richard M. Franco

RMF:acp

[6] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[7] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

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Letter No. O2

Richard Franco
Coalition for Responsible Equitable Economic Development in Los Angeles
c/o Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Response to Comment No. O2-1

The comment requests an extension of the 45-day public review of the Draft EIR by at least 30 days. The City has provided the following public review periods and opportunities for public input during the Shadowbox Studios EIR process:

- Publication and distribution of a Notice of Preparation (NOP) on March 28, 2022, notifying interested agencies, organizations, and persons that the City would be preparing an EIR for the Project and inviting comments on the scope and content of the EIR. The public review period for the NOP was from March 29, 2022, to April 28, 2022.
- Public scoping meeting held on April 21, 2022, at which the City accepted comments on the scope and content of the EIR.
- Publication and distribution of a Notice of Completion and a Notice of Availability of the Draft EIR on April 6, 2023, which notified interested agencies, organization, and persons that the City was accepting comments on the Draft EIR. The public review period for the Draft EIR began on April 6, 2023, and ended on May 22, 2023.
- Three Planning Commission meetings held on April 18, 2023, May 16, 2023, and June 20, 2023, to solicit comments from the public and the Planning Commission on the Draft EIR.

The public review process undertaken by the City for the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. Given the above, and based on direction provided by the City's Planning Commission, the Draft EIR review period was not extended.

In addition, the City received a request on April 27, 2023, for access to all documents referenced and incorporated by reference in the Draft EIR, and a subsequent formal Public Records request was created in the City's Resident Service Center. The City is given 10 calendar days to respond to the request. Due to the numerous and distinct records that were being requested, staff required additional time to compile, review, and provide the records responsive to the request. A response was sent to the requestor on May 8, 2023, notifying them of this requirement under the provision of Government Code 7922.535(b), which allows for an additional 14 calendar days to respond. All referenced documents, along with links to online documents that were available, were provided on May 15, 2023, closing the Public Records request.

Response to Comment No. O2-2

The comment correctly states that CEQA and the CEQA Guidelines require a lead agency to make the Draft EIR and all documents incorporated by reference in the EIR available for public review. The City of Santa Clarita provided the Draft EIR, its appendices (Appendices A through O), and the documents incorporated by reference for public review during the entire review period, which extended from April 6, 2023, to May 22, 2023. Documents were made readily available on the City

of Santa Clarita website (see https://www.santa-clarita.com/city-hall/departments/community-development/planning and https://www.santa-clarita.com/city-hall/departments/community-development/planning-division/environmental-impact-reports-under-review/shadowbox-studios-project), as well as at the City Clerk's Office (in Santa Clarita City Hall) and at the Old Town Newhall Library. However, CEQA Guidelines Section 15148 also recognizes that the "preparation of EIRs is dependent upon information from many sources" and that "these documents should be cited but not included in the EIR." There is no requirement that all materials simply cited in an EIR be provided by the lead agency to potential reviewers throughout the entirety of the Draft EIR public review period.

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LETTER O3

3250 Wilshire Boulevard
Suite 1106
Los Angeles, CA 90010

(213) 387-4287 phone
www.sierraclub.org

Sierra Club comments1

May 15, 2023

PROPOSED SHADOWBOX STUDIOS PROJECT
(Master Case 21-109)

COMMENTS

Upon review of the proposed Shadowbox Studios Project, there are numerous issues of concern to the Sierra Club. According to the EIR, this proposed project is too large for the area with "476,000 square feet of sound stages, approximately 221,000 square feet of production and administrative office space, approximately 560,000 square feet of workshops, warehouses and support use buildings, and approximately 37,500 square feet of catering and other specialty services." A proposed studio of this size will bring thousands of people to an already congested area in our valley--each day and night! O3-1

Such a large studio complex in this neighborhood is also especially concerning due to the need for a major zoning change in a Special Standards District—an area protected for a reason. If the proposed project were to be allowed, serious flooding will undoubtedly happen upstream and increased traffic will occur. The site of this proposed project is in an area which not only floods, but is also a wildfire hazard area. There needs to be more concern for public safety with this project. Additionally, we do not approve of the proposed removal of a Significant Ridgeline and the removal of oak trees--one of which is a Grandmother Oak. Ultimately, the removal of a Special Standards District, the threat of flooding to upstream neighbors, the increase in traffic in an already congested area, and the potential loss of life (in an emergency) all point to the fact that this development project is flawed. O3-2

The multiple impacts this project will have on the surrounding neighborhoods both in the short and long-term make this project one we do not support. **The Sierra Club of the Santa Clarita Valley asks that you vote to deny the project unless these issues are ameliorated. Many in the community are in opposition to this project!** O3-3

- **Zoning Changes:**
  The Santa Clarita Sierra Club group is concerned about the location of the proposed Shadowbox Studios Project as it is set to negatively impact the rural equestrian Placerita Canyon Special Standards District. Changing the zoning designation is unacceptable, especially when there are other locations in the Santa Clarita Valley that the Studio could utilize without impacting such a unique and protected area. The purpose of a Special Standards District is to maintain, preserve, and enhance the rustic California ranch character of the area. We stand in opposition to projects that violate the neighborhood protections that have been and are still promised in the City's General Plan and Municipal Code for Special Standards Districts. O3-4

LETTER O3 Continued

- **Flooding/Hydrology:**

The proposed location of the Shadowbox Studios development is in a location where serious flooding occurs each time there is heavy rain. During significant rain storm events, there is normally no serious issue on-site as the water is able to disperse over the floodplain without obstruction. However, once developed, the water will have no place to go except back upstream and into the Placerita Canyon neighborhood. Should this riparian habitat be channelized, the potential for intense flooding would be directed onto those upstream. We can say this with certainty because of the high floodwaters that residents have seen each rainstorm. O3-5

Another concern is that the hydrological evaluation that was conducted in the EIR indicates that the Placerita "Creek" will be channelized and the natural floodway will be removed. Placerita's waterway is a natural creek and creek wash area. This area is a blue-line stream and the importance of preserving this waterway in its' natural state is critical. Placerita's blue-line stream should never be channelized with concrete. Encroaching on this important blue-line stream on **both** sides of its boundaries is not necessary and could be handled in a better way. Also, preserving the natural blue-line stream is critical to reducing the ever-present dangers of flooding in Placerita Canyon. It is important to mention that the flooding danger would not only affect the Placerita neighborhood, but that of the proposed studio complex, as well. O3-6

The planners of this project have counted on sending additional flood waters into Newhall Creek in a high precipitation event. However, in flooding situations, additional water cannot spill into Newhall Creek, as it will also be flooded. This leaves the runoff nowhere to go except to spread on the entire property and/or backup. This does not even include the possibility of future additional runoff from impervious surfaces. O3-7

- **Traffic/Air Pollution:**

If this proposed project is allowed to be constructed, employees of the proposed Shadowbox Studios Project will bring thousands of additional "car trips" per day onto our surface streets, thus increasing air pollution. Air pollution levels have already been exasperated in the last decade by increased annual wildfires in the Santa Clarita Valley. While the planner has provided some simple fixes for this busy area—one more lane each for ingress and egress at 13th St., and a roundabout (for example), things are rarely ever that simple. This is especially true when the reliability of the Draft EIR's traffic study has been called into question. The planners of this project have made proposed slight traffic changes, while dramatically increasing the car trips per day in the area. This is not going to result in a "better traffic" situation. That same logic has been used in other neighborhoods and has resulted in residents being stressed, air quality being worsened, and residents being put in danger when a wildfire threatens. Adding this proposed project where so many individuals/vehicles/trailers, etc. would O3-8

LETTER O3 Continued

converge (along with the projected increase number and frequency of trains) is an irreversible mistake.

O3-8 Continued

- **Public Safety:**

Another concern is the fact that this proposed studio is in a high-risk fire danger area. Portions of the Project site are designated as Very High Fire Hazard Severity Zones (VHFHSZ). Constructing twenty-three buildings (for use by many hundreds of people) in such a fire area, without adequate ingress/egress is potentially a life-threatening situation for studio employees and residents alike. This fire hazard is not hypothetical. In 2016, as reported by SCVnews.com, "residents were stuck in their neighborhood" during the evacuations from the nearby Sand Fire (another area lacking enough egress/ingress) which burned 41,432 acres.

O3-9

During fires, the nearby freeway has been clogged with traffic and shut down due to accidents on a fairly regular basis. One of our more recent fires made it impossible for people to rapidly exit the valley using the freeway and the surface streets, including The Old Road and Newhall Avenue/Railroad Avenue. Traffic was brought to a crawl for hours. This project will have two means of ingress/egress, both of which connect directly to Railroad Avenue/Newhall Avenue. Residents of Placerita Canyon may have no means of escape when a very large fire occurs in the area, which experience tells us it will. The presence of a fire station on the site will have little impact when another fire roars through this area.

Interestingly enough, the EIR actually agrees with our concerns, stating: "The LOS evaluation described above shows that the limited capacity of the roundabout design could cause operational problems if traffic increases to the point that the roundabout operates as if it were under all-way stop control. In the event of an evacuation of the canyon, the traffic increases would push the roundabout operations into stop sign performance conditions. Thus, under evacuation conditions, the capacity limitations of the roundabout would result in failure of the roundabout design, increasing the time needed to maneuver through the roundabout and extending the line of cars queuing back toward the canyon, both of which are detrimental to the evacuation process."

O3-10

Emergency traffic concerns are compounded by the need to evacuate large animals with horse trailers. Both the additional number and size of the vehicles would further clog the streets.

Sierra Club is extremely concerned about the lasting damage to this canyon and the surrounding areas. We are strongly opposed to any building in an SEA. We are strongly opposed to building in a Very High Fire Hazard Severity Zone. Should this project be approved, it would be critical for the planners to use permeable asphalt whenever possible. Also, additional filtration and infiltration facilities would be needed to effectively handle water during flood events.

O3-11

LETTER O3 Continued

CONCLUSION

Sierra Club is concerned that if the proposed Shadowbox Studios Project development plan is approved it will permanently degrade the nature and character of Placerita Canyon (a Special Standards District area), destroy land that helps provide a place for floodwaters during periods of significant rainstorm events, and endanger people's lives and property. The removal of ancient oaks and a Significant Ridgeline along with the destruction of the natural floodway and channelization of a blue-line stream is unnecessary. These cumulative impacts, along with the cumulative impacts of additional traffic from the studio, additional proposed nearby building, along with the new traffic pattern of Dockweiller spilling an additional 10,000 car trips/day into the mix, should be taken into serious consideration. The Sierra Club requests that SCV Planning Commission denies approval of the Shadowbox Project unless our issues are ameliorated.

O3-12

Thank you for your consideration and time in reviewing our concerns.

Sincerely,

Sandra Cattell
Chair
Sierra Club, Santa Clarita Valley Group
Contact: sumcatt@yahoo.com

Letter No. O3
Sandra Cattell, Chair
Sierra Club, Santa Clarita Valley Group
3250 Wilshire Boulevard, Suite 1106
Los Angeles, CA 90010

Response to Comment No. O3-1

The comment states that the Sierra Club has numerous issues of concern regarding the Project. The comment also states that "According to the EIR, this proposed project is too large for the area…" It should be noted that the Draft EIR made no such assertion. The comment expresses the opinions of the commenter but does not address the adequacy of the Draft EIR. Accordingly, the comment is noted and will be forwarded to the decision-makers for consideration. No additional response is warranted.

Response to Comment No. O3-2

The comment expresses concern due to the Project's zone change request in a Special Standards District. The comment asserts that the Project would result in serious flooding, increased traffic, public safety issues due to the Project Site's location in a wildfire hazard area, the removal of a Significant Ridgeline, the removal of oak trees, and the potential loss of life in an emergency. It should be noted that the Project would not result in the removal of the Project Site from the Placerita Canyon Special Standards District (PCSSD). As discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would be required to undergo multiple City reviews to ensure that the Project complies with the requirements of the PCSSD. Moreover, the Project would not result in the removal of a Significant Ridgeline. As discussed in Section 4.10, the Project would not disturb the area beyond the base of the ridgeline north of Placerita Creek and would maintain the ridgeline as natural open space. Additionally, the Project would remove 13 oak trees, which would require an oak tree permit for the encroachment into the protected zone. The Project would comply with the permit requirements, which may include the relocation of impacted oak trees on- or off-site to offset the loss of trees. A total of 211 oak trees and 450 trees of different non-oak varieties are proposed to be planted throughout the Project Site. It is unclear what the commenter's reference to a "Grandmother Oak" is referring to, as the term "Grandmother Oak" is not a term used in the City's Oak Tree Preservation Ordinance (Santa Clarita Municipal Code Section 17.17.090) or otherwise defined by scientific methodology. Project impacts related to flooding, traffic, and wildfire are addressed in Sections 4.9, Hydrology and Water Quality, 4.14, Transportation, and 4.17, Wildfire, of the Draft EIR, respectively. Public safety issues related to emergency evacuation are addressed in Sections 4.8, Hazards and Hazardous Materials, and 4.17, Wildfire, of the Draft EIR. As concluded in the Draft EIR, impacts related to these issues of concern would be less than significant. The comment does not provide any evidence to the contrary, and no additional response is warranted.

Response to Comment No. O3-3

The comment states that many community members are opposed to the Project and requests that the City deny the Project due to the multiple short and long-term impacts that the Project will have on the surrounding neighborhoods. The comment does not specify the impacts or address the adequacy of the Draft EIR. Accordingly, the comment is noted and will be forwarded to the decision-makers for consideration. No additional response is warranted.

Response to Comment No. O3-4

The comment expresses concern over the location of the Project within the PCSSD and how the requested zone change would impact the area. The zone change request for the northern portion of the Project Site from NU5 to MXN would have no impact on the Project's requirement to comply with the applicable development standards of the PCSSD. As discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would undergo multiple City review processes to ensure that the Project would be compatible with the existing rural, rustic California ranch character of the surrounding area in accordance with the PCSSD. The analysis in Section 4.10 of the Draft EIR concluded that the Project would be consistent with the City's General Plan, Santa Clarita Municipal Code, and with the PCSSD development standards. The comment does not specify the impacts or address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O3-5

The comment expresses concern that development of the Project would result in flooding upstream. Based on the Hydraulic Report, which analyzed both the existing and developed conditions for the creek drainage, flooding would not occur on the Project Site or upstream properties as a result of the Project. The proposed drainage basin located in the far northwest corner, west of the north parking lot, within the Project Site would detain stormwater during significant rain events. The proposed underground infiltration chambers/drainage basin would capture the 85th percentile, which equates to the first ¾ inch of rainfall in all rain events.[10] As discussed in Section 4.9, Hydrology and Water Quality, of the Draft EIR, the Project would allow for stormwater to be contained and treated on-site prior to being released to Placerita Creek, ensuring that stormwater runoff rates and volumes do not result in flooding on-site or off-site due to Project implementation.

Response to Comment No. O3-6

The comment expresses concern that the Project would channelize Placerita Creek with concrete and remove a natural floodway. The Project is proposing buried rock bank stabilization and not concrete as stated in the comment. Bank protection on both sides of Placerita Creek is necessary to prevent erosion and maintain the flow within the creek. Refer to the Hydraulic Report prepared for the Project, which analyzed the existing and developed conditions for the creek and concludes that there is no adverse impact to the Project Site or upstream properties.

Response to Comment No. O3-7

The comment claims that the Project would send additional flood waters into Newhall Creek in a high precipitation event. Newhall Creek is located downstream of Placerita Creek on the westerly side of Railroad Avenue. The Hydraulic Report prepared for the Project analyzed both the existing and developed conditions for the creek drainage and concludes that there is no downstream impact to the Newhall Creek. Furthermore, the proposed drainage basin within the Project Site would capture and detain stormwater runoff during significant rain events. The proposed underground filtration chambers/drainage basin would capture the first ¾ inch of rainfall in all rain events. The calculation for the ¾-inch treatment volume is determined by the 85th percentile storm which equates to ¾-inch of rainfall. As discussed in Section 4.9, Hydrology and Water

[10] Alliance Land Planning and Engineering, Craig M. Whitteker, PE 51929, USMP/LID Report, May 12, 2023.

Quality, of the Draft EIR, the Project would allow for stormwater to be contained and treated on-site prior to being released to Placerita Creek, ensuring that stormwater runoff would not substantially increase and spread across the Project Site or backup as a result of Project implementation.

Response to Comment No. O3-8

The comment asserts that Project would result in thousands of additional car trips, which would increase air pollution levels in the Santa Clarita Valley. The comment also questions the reliability of the Draft EIR's traffic study but does not provide specific reasons or provide substantial evidence that the traffic study is inadequate. Pursuant to Senate Bill 743, the primary metric to evaluate transportation is now vehicle miles traveled (VMT), as referenced in Appendix G of the CEQA Guidelines. Although the Project would generate additional vehicle trips, the Project would generate an average home-based work VMT per employee of 14.0, which is less than the City's threshold of significance of 15.7. Therefore, as evaluated in Section 4.14, Transportation, of the Draft EIR, impacts would be less than significant without mitigation. Additionally, the analysis in Section 4.2, Air Quality, of the Draft EIR determined that the Project's air quality impacts would be less than significant without mitigation based on a quantified evaluation of Project-generated air emissions as compared with the thresholds of significance established by the South Coast AQMD.

Response to Comment No. O3-9

The comment states that the Project Site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) and that a potentially life-threatening situation could occur during a large fire event without adequate ingress/egress. As discussed in Section 4.17, Wildfire, of the Draft EIR, the Project would utilize several exits in the event of a fire evacuation, including the main entrance and two other access-controlled gates, one located immediately east of the main entrance at the eastern leg of the intersection of Arch Street and 13th Street, and one along 12th Street immediately east of the proposed catering buildings. In addition, a traffic evacuation assessment was conducted to analyze the off-site improvements proposed by the Project, without and with the Dockweiler Drive Extension Project, which demonstrated that the Project roadway improvements would facilitate the evacuation of the Placerita Canyon area by reducing the evacuation congestion period at Arch Street and 12th Street and Dockweiler Drive. The traffic signal intersection design would provide for the most efficient traffic operations under an evacuation scenario. Therefore, as concluded in Section 4.17, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

Response to Comment No. O3-10

The comment correctly quotes the key evacuation consideration from page 81 of the Project's Transportation Assessment, which was included as Appendix L of the Draft EIR. However, the comment omits the fact that a traffic evaluation assessment was conducted for the Placerita Canyon Area to measure the anticipated performance of Dockweiler Drive, Arch Street, and 13th Street in the event of an emergency evacuation under Existing Conditions and Future with Project Conditions. The results of the assessment are summarized on page 85 of the Project's Transportation Assessment, which concluded that the off-site improvements proposed by the Project would reduce the evacuation congestion period that would be experienced under existing conditions. The full

traffic evacuation assessment is provided in Appendix N of the Draft EIR. This comment does not specify the impacts or address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O3-11

The comment states the Sierra Club's concern about the damage that the Project would cause to the canyon and surrounding areas and expresses opposition to building in a Significant Ecological Area (SEA) and VHFHSZ. To clarify, as discussed on page 4.3-24, in Section 4.3, Biological Resources, of the Draft EIR, the Project Site is not within an SEA. The comment also states that permeable asphalt and additional filtration and infiltration facilities should be implemented to address flooding. Please see Response to Comment Nos. O3-5 through O3-7, which address flooding on the Project Site and surrounding area. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O3-12

The comment summarizes Sierra Club's concern that the Project would permanently degrade the nature and character of Placerita Canyon and result in the removal of oaks and a significant ridgeline, the destruction of the natural floodway, the channelization of a blue-line stream, and cumulative traffic impacts. To clarify, as noted in the prior responses above, the Project would undergo multiple City review processes to ensure that the Project would be compatible with the existing rural, rustic California ranch character of the surrounding area in accordance with the PCSSD; the Project would not disturb the area beyond the base of the ridgeline north of Placerita Creek and would maintain the ridgeline as natural open space; and the Project is proposing buried rock bank stabilization rather than concrete channelization. The comment reiterates Sierra Club's request for the City to deny the Project unless these concerns are addressed. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

LETTER O4

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Via Email

May 18, 2023

Erika Iverson, City Planner
Santa Clarita Planning Department
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EIVERSON@santa-clarita.com

Re: Comment on Draft Environmental Impact Report, Shadowbox Studios Project (SCH 2022030762)

Dear Ms. Iverson:

This comment is submitted on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Shadowbox Studios Project (SCH 2022030762), which proposes the construction of a film and television studio campus consisting of approximately 473,000 square feet of sound stages; approximately 561,500 square feet of workshops, warehouses, and support uses; and approximately 221,000 square feet of production and administrative offices, located at Railroad Avenue and 13th Street in the City of Santa Clarita ("Project").

O4-1

SAFER is concerned that the DEIR fails as an informational document and that it fails to impose all feasible mitigation measures to reduce the Project's significant environmental impacts. SAFER requests that the Community Development Department address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project.

SAFER reserves the right to supplement these comments during the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,

Richard Drury
Lozeau Drury LLP

Letter No. O4

Richard Drury
Supporters Alliance for Environmental Responsibility
c/o Lozeau Drury LLP
1939 Harrison Stret, Suite 150
Oakland, CA 94612

Response to Comment No. O4-1

The comment expresses concern that the Draft EIR failed as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impact but provides no specific evidence to support these claims. The comment requests the City address the shortcomings in a revised Draft EIR and recirculate prior to approval. The comment states it reserves the right to supplement the comments during the administrative process. Overall, the comment does not identify any specific shortcomings of the Draft EIR analysis or mitigation measures. Accordingly, no specific response is required. Furthermore, the Draft EIR fully complied with all of CEQA's mandates, and the comment presents no information or substantial evidence about any specific impact area and, as such, does not present any information that meets any of the criteria for recirculation of the Draft EIR. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

LETTER O5

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VIA E-MAIL

May 19, 2023

Erika Iverson
Planner
City of Santa Clarita
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RE: City of Santa Clarita's Shadowbox Studios DEIR Comment Letter

Dear Erika Iverson,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), our office is submitting these comments for the City of Santa Clarita's (the "**City**") Shadowbox Studios project (the "**Project**").

The Southwest Carpenters is a labor union representing over 57,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts. **O5-1**

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. California Government Code ("**Gov. Code**") § 65009, subd. (b); Public Resources Code ("**Pub. Res. Code**") § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the DEIR (the "**DEIR**") submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191

(finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**") (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). Pub. Res. Codes §§ 21092.2, and 21167(f) and Gov't Code § 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

O5-1
Continued

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board

and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas ("**GHG**") emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to

O5-1
Continued

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

O5-1 Continued

Therefore, the City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as

O5-2

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

"an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("Berkeley Jets"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal.3d 376, 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines § 15002(a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

O5-2
Continued

B. The City Should Prepare an EIR for the Project

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard, under which an agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v City of Encinitas* (1994) 29 CA4th 1597, 1602; *Friends of "B" St. v City of Hayward* (1980) 106 Cal.App.3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." Pub Res C §21151; *No Oil, Inc. v City of Los Angeles* (1974) 13 C3d 68, 75; *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 884. Under this test, if a proposed project is not exempt and *may* cause a significant effect on the environment, the lead agency *must* prepare an EIR. Pub Res C §§21100(a), 21151; 14 Cal Code Regs §15064(a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. *Parker Shattuck Neighbors v Berkeley City Council* (2013) 222 CA4th 768,

O5-3

785. In such a situation, the agency must adopt a negative declaration. Pub Res C §21080(c)(1); 14 Cal Code Regs §§15063(b)(2), 15064(f)(3).

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." Pub Res C §21068; 14 Cal Code Regs §15382. See §13.2. A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. *No Oil, Inc. v City of Los Angeles,* 13 C3d at 83 n16; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. 14 Cal Code Regs §15063(b)(1). See *County Sanitation Dist. No. 2 v County of Kern* (2005) 127 CA4th 1544, 1580.

O5-3
Continued

This standard sets a "low threshold" for preparation of an EIR. *Consolidated Irrig. Dist. v City of Selma* (2012) 204 CA4th 187, 207; *Nelson v County of Kern* (2010) 190 CA4th 252; *Pocket Protectors v City of Sacramento* (2004) 124 CA4th 903, 928; *Bowman v City of Berkeley* (2004) 122 CA4th 572, 580; *Citizen Action to Serve All Students v Thornley* (1990) 222 CA3d 748, 754; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 886; *Clews Land & Livestock v City of San Diego* (2017) 19 CA5th 161, 183; *Stanislaus Audubon Soc'y, Inc. v County of Stanislaus* (1995) 33 CA4th 144, 150; *Brentwood Ass'n for No Drilling, Inc. v City of Los Angeles* (1982) 134 CA3d 491; *Friends of "B" St. v City of Hayward* (1980) 106 CA3d 988. See also 14 Cal Code Regs §15064(f)(1).

C. <u>CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light</u>

To afford the public an opportunity to review and comment on an EIR, "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to PRC § 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in accordance with PRC § 21092.1. CCR § 15088.5.

O5-4

Significant new information includes "changes in the project or environmental

setting as well as additional data or other information" that "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative)." CCR § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

O5-4 Continued

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

Based on the arguments set forth below, in the alternative, the Carpenters request that the City recirculate the DEIR upon making any revisions due to significant new information.

D. The DEIR Improperly Labels Mitigation Measures as "Project Design Features"

O5-5

The DEIR improperly labels mitigation measures as a "Project Design Features" or "PDFs" throughout the DEIR, and which the DEIR purports to use in assessing regulatory requirements in the DEIR and consistently conflates them with mitigation. The DEIR then provides a disclaimer that the PDFs are not to mitigate impacts:

> Project Design Features As applicable, the Project Design Features subsection identifies components of the Project that would be implemented above and beyond compliance with specific regulations

> and requirements but not for the purpose of mitigating the Project's significant impacts (e.g., provision of rooftop photovoltaic systems and solar panels not required by the Santa Clarita Municipal Code).

O5-5 Continued

DEIR, 4.0-2

And yet, the DEIR's disclaimer is inaccurate; its use of the PDF is similarly improper.

For example, the DEIR provides for PDFs for air quality, stating:

> PDF-AQ-1: The Project will operate off-road diesel-powered construction equipment to meet or exceed CARB and USEPA Tier 3 off-road emissions standards with Level 3 diesel particulate filters or be alternatively (non-diesel) fueled to reduce diesel exhaust emissions.
>
> PDF-AQ-2: Off-road diesel-powered construction equipment will meet or exceed the CARB and USEPA Tier 3 off-road emissions standards and be equipped with Level 3 diesel particulate filters at a minimum.

(DEIR, 4.2-18.)

As shown in this example, what the DEIR calls a PDF is actually a mitigation measure to reduce construction-related air quality impacts. For example, while the DEIR concludes that the Project's air quality impacts will be less than significant, it does nonetheless rely, at least in part, on the PDFs, stating:

O5-6

> "In addition, the Project includes Project Design Features PDF-AQ-1 and PDF-AQ-2, identified in Subsection 4.2.5, Project Design Features, above, to ensure that only off-road diesel-powered equipment with proper particulate filers are used on-site, which would further reduce DPM emissions.

(DEIR, p. 4.2-22.)

It is also noteworthy that the DEIR's PDF does not propose the more stringent Tier 4 off-road emission standards but rather Tier 3 ones. Yet, Tier 4 has long been known to be more protective of the environment by the EPA.[5], [6]

The City's conclusion in the DEIR that the Project would have no air quality impacts, including due to PDFs, is also flawed since it only looks at the residential uses nearby.

O5-7

[5] https://axi-international.com/epa-tier-engine-emissions-standards-explained/
[6] EPA rule re Tier 4, available at: https://www.govinfo.gov/content/pkg/FR-2004-06-29/pdf/04-11293.pdf

(DEIR, p. 4.2-21.) Yet, the DEIR elsewhere explains that the Project is surrounded by other non-residential uses as well, which – contrary to the DEIR's assertions – may nonetheless have sensitive receptors:

> SENSITIVE RECEPTORS
>
> Sensitive receptors are a land use associated with persons of a population that are more susceptible to the effects of air pollution than the general population. Sensitive receptors that are in proximity to localized sources of TACs and CO are of particular concern. The following population groups are most likely to be adversely affected by air pollution, as identified by the California Air Resources Board (CARB): children under 14, elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. Land uses that **may** contain a high concentration of these sensitive population groups **include residential** areas, **hospitals**, **day-care** facilities, **elder-care** facilities, elementary **schools**, and **parks**.

O5-7
Continued

(DEIR, p. 4.2-6, emph. added.)

But see, the DEIR's subsequent admission about other sensitive receptors nearby:

> There are **two churches** in the general Project vicinity, Newhall Christian Church, approximately 300 feet to the east, and Village Church, approximately 525 feet to the west of the Project Site. However, these uses would not have direct line-of-sight to the Project Site due to intervening structures, consisting of residential or commercial uses. Likewise, **nearby schools**, including Placerita Junior High School, Hart High School, Newhall Elementary School, and the Master's University, are also shielded by intervening commercial and residential uses and are located more than 900 feet from the Project Site.

(DEIR, p. 4.11-4, emph. added.)

As such, by labeling the air quality mitigation measure as PDFs, the DEIR removes those from scrutiny as to whether those PDFs are the most effective to reduce air quality impacts. Similarly, by omitting critical sensitive receptors at churches and schools and by only focusing on the residential areas, the DEIR further understates the air quality impacts to conclude that those would be less than significant. The DEIR's

conclusions as to the PDFs and the air quality impacts, therefore, are inaccurate and unsupported. O5-7 Continued

Similarly, the DEIR relies on PDFs for purposes of impacts of public services, stating:

> PDF-PUB-1: All buildings shall be accessible to LACoFD apparatus by way of access roadways, with an all-weather surface of not less than 28 feet in width. The **roadway shall** be **extended** to within 150 feet of all portions of the exterior walls when measured by an unobstructed route along the exterior of the building. The roadway shall provide approved signs and/or striping stating "No Parking – Fire Lane" and shall be maintained in accordance with the Los Angeles County Fire Code.

(DEIR, p. 4.13-8, emph. added.) O5-8

The DEIR then uses this PDF to conclude that the Project would have adequate fire access and therefore no potential for fire impacts. (DEIR, p. 4.13-10.)

And yet, as shown above, the PDF proposes to extend the roadway, which in and of itself may have impacts on the environment. However, because it is called as a PDF and not a mitigation measure, it escapes scrutiny of whether the PDF will be in fact feasible, or whether it will not have impacts of its own.

And again, the City's DEIR uses PDFs for traffic mitigation purposes, stating in part:

> PDF-TA-1: The Project will incorporate several Transportation Demand Measures (TDM) features to contribute to the reduction in VMT and vehicle trips to and from the Project Site. These actions are consistent with City and State of California transportation and GHG policies and objectives. The following measures will be incorporated into the Project to reduce VMT and vehicle trips: O5-9
>
> • Flexible work schedules and telecommuting programs
>
> • **Bicycle amenities** (bicycle racks, lockers, showers, etc.)
>
> • **Carpool** programs and support
>
> • Tenant-based guaranteed **ride home** (GRH) program
>
> • Flex car support

- Preferential parking locations for high-occupancy vehicles
- TDM promotions and marketing
- Pedestrian network improvements
- **On-street bicycle facilities**
- Bicycle parking per Santa Clarita Unified Development Code

(DEIR, p. 4.14-12, emph. added.)

O5-9
Continued

Only later, the DEIR discloses: "Consistent. The Project proposes to include a **bicycle path on 13th Street**, as well as **upgrades** to the **intersection of 13th Street** and **Arch Street** to provide and **enhance the multimodal circulation** in the Project area." (DEIR, p. 4.14-13, emph. added.)

Here too, because the DEIR labels various traffic mitigation measures as merely PDFs, they avoid scrutiny of whether those measures would be efficient or whether they will not have impacts of their own in need of mitigation. As an example here, the PDF proposing bicycle facilities, and more precisely, a bicycle path on the 13th street, or carpool programs or ride homes may not necessarily prove to be effective or feasible. Besides, those may have their own impacts on the environment. These issues are not studied or addressed in the DEIR only because these improvements are listed as PDFs and not mitigation measures.

The above-noted observations are applicable to the DEIR's PDFs to mitigate wildfire risk and hazards. (DEIR, p. 4.17-10.)

However, it is established that "'[a]voidance, minimization and / or mitigation measure' . . . are not 'part of the project.' . . . compressing the analysis of impacts and mitigation measures into a single issue . . . disregards the requirements of CEQA." *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656.

O5-10

When "an agency decides to incorporate mitigation measures into its significance determination, and relies on those mitigation measures to determine that no significant effects will occur, that agency must treat those measures as though there were adopted following a finding of significance." *Lotus*, supra, 223 Cal.App.4th at 652 [citing CEQA Guidelines § 15091(a)(1) and PRC § 21081(a)(1).

By labeling mitigation measures as project design features, the City violates CEQA by failing to disclose "the analytic route that the agency took from the evidence to its

findings." PRC § 21081.5; CEQA Guidelines § 15093; *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1035 (*citing Topanga Assn for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515).

The DEIR's use of this PDF further violates CEQA because such measures would not be included in the Project's Mitigation Monitoring and Reporting Program CEQA requires lead agencies to adopt mitigation measures that are fully enforceable and to adopt a monitoring and/or reporting program to ensure that the measures are implemented to reduce the Project's significant environmental effects to the extent feasible. PRC § 21081.6; CCR § 15091(d). **O5-10 Continued**

Therefore, using Project Design Features in lieu of mitigation measures violates CEQA. The City should revise and recirculate its EIR in light of the noted new and significant information showing that the PDFs themselves may have impacts and the Project's impacts may be understated and actually more severe than disclosed.

E. The DEIR Fails to Support Its Findings with Substantial Evidence

When new information is brought to light showing that an impact previously discussed in the DEIR but found to be insignificant with or without mitigation in the DEIR's analysis has the potential for a significant environmental impact supported by substantial evidence, the DEIR must consider and resolve the conflict in the evidence. (See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109.) While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. (CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (2017) 3 Cal. App. 5th 497, 515; *Mission Bay Alliance v. Office of Community Inv. & Infrastructure* (2016) 6 Cal. App. 5th 160, 206.) And when there is evidence that an impact could be significant, an EIR cannot adopt a contrary finding without providing an adequate explanation along with supporting evidence. (*East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 302.) **O5-11**

In addition, a determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v.*

Department of Food & Agric. (2005) 136 Cal.App.4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. *See also Ebbetts Pass Forest Watch v Department of Forestry & Fire Protection* (2008) 43 Cal.App.4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

O5-11
Continued

1. *The DEIR Fails to Supports its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.4 allow a lead agency to determine the significance of a project's GHG impact via a qualitative analysis (e.g., extent to which a project complies with regulations or requirements of state/regional/local GHG plans), and/or a quantitative analysis (e.g., using model or methodology to estimate project emissions and compare it to a numeric threshold). So too, CEQA Guidelines allow lead agencies to select what model or methodology to estimate GHG emissions so long as the selection is supported with substantial evidence, and the lead agency "should explain the limitations of the particular model or methodology selected for use." CEQA Guidelines § 15064.4(c).

O5-12

CEQA Guidelines sections 15064.4(b)(3) and 15183.5(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines §§ 15064.4(b)(3) and 15183.5(b)(1) make clear qualified GHG reduction plans or CAP should include the following features:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels;

Collectively, the above-listed features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and the substantial evidence that the incremental contribution of an individual project is not cumulatively considerable. **O5-12 Continued**

Second, it is not enough for an environmental document to conclude there is no significant GHG emissions impacts based upon a determination of consistency with a GHG Reduction Plan, without also making a determination based upon substantial evidence of the project's actual cumulative contributions to GHG emissions. In other words, a determination of consistency is only a starting point.[7] Compliance or non-compliance is merely one factor to be considered. The lead agency must explain how reliance on any particular plan or regulation addresses a potential impact.

The DEIR, among other statements, asserts: "Moreover, the Project would reduce VMT and energy demand, thereby reducing GHG emissions, by constructing a large employment generator in a housing-rich area of the SCAG region..." (DEIR, p. 4.7-14.)

To be clear, the Project, as the DEIR describes, is massive and is proposed on undeveloped land: **O5-13**

[7] Cal. Nat. Res. Agency, Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines, OAL Notice File No. Z-2018-0116-12 (Nov. 2018), at p. 95; see also *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal. App. 4th 1170, 1207 (""[A]n inconsistency between a project and other land use controls does not in itself mandate a finding of significance. [Citations.]

> The Project would be constructed on a **93.5- acre parcel** at the northeast corner of Railroad Avenue and 13th Street, located within the central part of the City near existing residences and commercial uses. The Project would repurpose the **existing vacant site** and develop a **full-service film** and **television studio campus**. The Project Site was chosen due to its proximity to existing residences and public transit.
>
> Once operational, the Project would provide **services** to the local area by generating approximately **2,333 direct jobs** and **3,500 indirect jobs** for a total of approximately **6,000 jobs**. **These jobs would be available to existing and future City residents, in addition to residents in surrounding communities and cities.**

(DEIR, p. 4.7-15, emph. added.)

As such, the Project does not reduce any traffic – it in fact brings traffic to the City, including from other regions. The Project here is not a residential project or mixed use – it is an employment center, which will necessarily be growth-inducing, since it may result in people moving to the area to live in light of this employment opportunity.

O5-13
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Here, however, the DEIR identifies but fails to demonstrate, beyond conclusory and misleading assertions, consistency with various legislative plans, such as the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and general plan (DEIR p. 4.7-7-11) that include the above-listed requirements to be considered a qualified CAP or GHG Reduction Plan for the City. By way of example, it is unclear how such a large studio and facility with constant daily traffic is consistent with Goal CO 8 which intends energy efficiency and reducing energy and natural resource consumption and reduce emissions of greenhouse gases as well as reaching targeted reductions of GHG emissions consistent with AB 32, SB 375, and other implementing regulations when the Project is necessarily going to significantly increase GHG emissions from its current uses. Consistency with the other policies and the Santa Clarita Municipal Code section 24.01.010 are similarly lacking, especially considering the mentioned but unclear adherence to CEQA Guidelines 15064.4 that imposes requirements to consider several factors in determining significance. And those are a handful of examples.

O5-14

As such, the DEIR leaves an analytical gap showing that compliance with said plans can be used for a project-level significance determination for the Project.

Further, the DEIR fails to explain how compliance with the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and the general plan leads to a less than significant impact, and specifically offsetting the increased GHG emissions due to increased traffic in connection with the construction of the studio and the use of them indefinitely thereafter, nor does it acknowledge updates to these programs since the drafting of the DEIR.

O5-14
Continued

2. *The DEIR Fails to Demonstrate How Compliance or Consistency with Applicable Greenhouse Gas Reduction Plans Will Lead to a Less than Significant Impacts on Greenhouse Gas Emissions.*

Second, the DEIR fails to explain or analyze how compliance with the GHG Reduction Plan (DEIR p. 4.7-6), even if it qualified for a consistency evaluation, will lead to a less than significant impact. The lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable" (emphasis added).[8]

O5-15

3. *The DEIR Fails to Evaluate Cumulative Project GHG Impacts.*

A DEIR must discuss cumulative impacts when they are significant and the project's incremental contribution is "cumulatively considerable." CEQA Guidelines §15130(a). A project's incremental contribution is cumulatively considerable if the incremental effects of the project are significant "when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." CEQA Guidelines §15065(a)(3).

O5-16

Here, there is no evidence that the DEIR's Air Quality, Energy, Greenhouse Gas Emissions, and Health Risk Assessment Impact Analysis evaluated the Project's cumulative project GHG emissions, although it is mentioned in reference to other plans (DEIR p. 5.9-23).

Besides, given the above-described flawed and conclusory analysis of the Project's individual VMT and related GHG impacts and findings of less than significant impacts

[8] Natural Resources Agency (Nov. 2018) Final Statement of Reasons For Regulatory Action: Amendments To The State CEQA Guidelines ("2018 Final Statement of Reason"), p. 6, http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf;

in the DEIR, the conclusion of no cumulative impact is derivatively inaccurate and unsupported.

The DEIR needs to conduct an accurate cumulative GHG impacts analysis, and if there is a potentially significant impact, impose adequate and all feasible measures.

O5-16
Continued

4. *The DEIR Fails to Analyze Cumulative Project Air Quality Impacts.*

The DEIR indicates that there would be several air quality impact domains but none that result in potentially significant impacts and suggests mitigation would be implemented to attend to the development-specific air quality mitigation measures through compliance with the SCAQMD (DEIR p. 4.2-19). This is inappropriate. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B); *see also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 [EIR failed to provide and commit to specific criteria or standard of performance for mitigating impacts to biological habitats]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management]. Implementing mitigation, even if project specific, cannot be deferred until after Project approval.

O5-17

The DEIR only mentions some, but not all, of the nearby sensitive receptors, and fails to mention them in analysis concerning GHGs and only mentions them in Air Quality impacts as they relate to GHGs and air quality. In any case, the only ones mentioned are the single-family residences along Alderbrook Drive, the single-family residences south of Via Princessa, the single-family residences along Placeritos Boulevard, the mobile home park residences at 24833 Railroad, the Newhall Christian Church, the Village Church, Placerita Junior High School, Hart High School, Newhall Elementary School, and the Master's University (DEIR p. 4.11-4).

These are a critical omissions because these businesses, churches, and schools for young children will likely be significantly impacted by the Project's permanent operations and air quality impacts such as the increased traffic due to the Project's implementation air quality impacts, and other uses and activities corresponding with the significant increase in patrons, residents, and other congestion and use compared to its current use that lasts only part of the year, and thus drastically impacting the air quality analysis conducted in the DEIR, especially given the traffic and parking garage use that will persist throughout all hours of the day if the project is approved and

implemented, and notwithstanding the other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 4.11-4), and sustained residential and commercial activities.

It further appears the proposed Project's development would occur in one phase spanning the two to three years (DEIR 4.11-5; 4.11-15) and therefore it is exceedingly likely that the sensitive receptors would be also impacted by significant construction and permanent air quality impacts at some point in the proposed Project's development cycles in the short term for another two to three years due to construction, and indefinitely beyond that for sustained uses.

The DEIR also indicates that it would not exceed its NOx, CO, and PM emissions with respect to applicable regional thresholds of significance set by the South Coast AQMD (DEIR 4.2-23), but inappropriately limits the distance impact to 70-feet to only include the closest sensitive receptors, without also including the other sensitive receptors and analyzing their distances, even though they are further. This is inappropriate. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. Furthermore, this may create significant and unavoidable impacts that would cumulative contribute to nonattainment designations in the SCAQMD, contrary to the DEIR's suggestions (DEIR 4.2-24). Because of this, or that the Project would introduce significant and unavoidable impacts even with mitigation, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O5-17 Continued

5. *The DEIR Fails to Adequately Disclose and Analyze the Project's Significant Noise Impacts.*

The DEIR conducts a thorough but frequently flawed noise analysis (DEIR p. 4.11-1-25). Generally speaking, the Project proposes significant changes in landscaping, which will necessarily involve corresponding significant increases to noise levels during

O5-18

construction and indefinitely after the Project is completed, especially considering the scope and scale of the Project as a massive television and movie studio.

As for sensitive receptors, the DEIR only mentions some, but not all, of the nearby sensitive receptors. The single-family residences along Alderbrook Drive, the single-family residences south of Via Princessa, the single-family residences along Placeritos Boulevard, the mobile home park residences at 24833 Railroad, the Newhall Christian Church, the Village Church, Placerita Junior High School, Hart High School, Newhall Elementary School, and the Master's University (DEIR p. 4.11-4). The DEIR also suggests that these sensitive receptors here would be shielded by intervening commercial and residential uses and are more than 900 feet from the Project site (DEIR p. 4.11-4).

But the DEIR fails to mention the Picasso's Playmates Creative Center, which caters to students of all ages, including very young children. The DEIR also fails to mention the nearby Santa Clarita Motel, Valencia Open Bible Church, the Iglesia El Buen Samaritano, the Affordable Veterinary Clinic, the Learning Post Academy adjacent to Hart High School, the Saint Sarkis Armenian Apostolic Church, the Allemande Music Academy, the Iglesia Del Calvario, the Elevate Church, Temple Beth Ami A Reform, Kingdom Hall of Jehovah's Witnesses, Our Lady of Perpetual Help Pastoral Center, Golden Oak Adult School, The Old Town Newhall Library, The Master's College and Master's University, Little Shepherds Nursery School, Hotel Lexen Santa Clarita Valencia Near Six Flags, Newhall Apartments, Ken-Lor Apartments, Whispering Oaks Senior Apartments, The Los Angeles County Fire Department Station 73, The Placerita Bible Church, and all other surrounding single-family residences and apartments, such as Golden Oaks Apartments, Villa Los Arboles Apartments, The Canyons at Santa Clarita Apartments, Walnut Park Cottages, and others.

O5-18 Continued

The primary noise sources were identified in the DEIR as vehicle traffic and railroad activity (DEIR p. 4.11-4), and significantly only measured noise in the early to mid-afternoon and not any other time throughout the day even though construction is anticipated to take place between the hours of 7:00 am to 7:00 pm Monday through Friday, and 8:00 am to 6:00 pm Saturday (DEIR 4.11-5; 4.11-15), so the sample size taken to account for noise levels accounts for only a fraction of the time and days (which aren't specified as to which days were sampled) and as such do not fully analyze the noise impacts that could be appropriately extrapolated to determine noise impacts. An agency may not avoid its responsibility to prepare proper environmental analysis by

O5-19

failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

The DEIR finds that the proposed Project would not result in a significant impact from traffic noise and indicates no feasible mitigation measures exist to reduce Project traffic noise impacts, even though it fails to analyze the other nearby sensitive receptors, including schools for small children and churches, hospice centers, a sea of surrounding single-family residences, and significant increases in noise levels beyond the current site uses, especially with the implementation of a nearly 93.5-acre site consisting of nearly 500,000 square feet of sound stages, over 200,000 square feet of production and administrative offices, and approximately 36,000 feet of catering and other specialty services for a nearly 1,300,000 square feet building area (DEIR pp. 4.11-14-25; ES-1).

Because of this, or that the Project would likely introduce significant and potentially unavoidable impacts even with mitigation, and as such the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements, and certainly not the latter. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O5-19
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Given that the Project proposes significant changes in the landscape from an undeveloped plot that was never used for any purposes and will now be expanded to uses that will last all year and all times of the day, including improvements such as paved roads, constant traffic of construction vehicles and long-term transportation of large filmmaking equipment, parking, studios, catering, utility infrastructure, landscaping, signage, lighting, property walls, sidewalk improvements, and other immense structure and infrastructure implementation for the Project site, it is critical to conduct a thorough noise analysis, especially given the plethora of surrounding sensitive receptors.

The DEIR identified only a small fraction of the nearby sensitive receptors and the DEIR neglects or appears to neglect the other aforementioned sensitive receptors. This is a critical omission because these businesses, churches, and schools for young

children, and others will likely be significantly impacted by the Project's permanent operations and noise impacts associated with a large film and television studio and the significant increases in traffic and other ambient noise compared to its current undeveloped status that has no stationary or operational noise. The development of such a massive Project, especially juxtaposed to its current vacant site and undeveloped status drastically impacts the noise analysis conducted in the DEIR, which is amplified by the automobile and truck traffic that persists throughout all hours of the day if the Project is approved and implemented.

And, the nighttime construction and other construction activities that is proposed and likely to impact the currently existing sensitive receptors which includes on estimated demolition and grading, paving, building construction and painting over 29 months, which would utilize heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, scrapers, and other equipment, during the hours of 7:00 am to 7:00 pm Monday through Saturday and only recognizes broader definitions of annoyance (human annoyance) which does not acknowledge to the specific impacts of this project to the nearest sensitive receptor (or other further sensitive receptors), over a nontrivial construction length (approximately 29 months). It appears the proposed Project's development would occur in phases spanning the next two to three years at a minimum (DEIR pp. 4.11-10-14) and therefore it is exceedingly likely that the sensitive receptors both acknowledged and unacknowledged, including the residences north of Victoria and south of the PCH would be also impacted by significant construction and permanent noise impacts at some point in the proposed Project's development cycle and beyond. O5-19 Continued

Lastly, the DEIR also leapfrogs impacts to these receptors by collapsing them to the closest residences to only those within close proximity to the Project (DEIR p. 4.11-5, 18-21), thereby artificially minimizing the noise impacts to these areas and other areas that are likely to be nonetheless impacted by the Project's construction and subsequent operation.

For all of these reasons, the DEIR's noise impact analysis, both individual and derivatively also cumulative, is fatally flawed, understated, and must be revised to comply with CEQA. For the same purpose, the missing information presents more severe impacts and therefore a significant information requiring the EIR recirculation.

6. *The DEIR Fails to Adequately Analyze Hazards and Hazardous Materials Impacts.* O5-20

The DEIR relies on the Environmental HELP Inc. Phase I Environmental Site Assessment report from 2020 to assess the hazard and hazardous materials impacts (DEIR p. 4.8-1).

The DEIR notes the proposed Project in or near existing in a very high fire hazard severity zone, including the Placerita Creek bed. This is critical especially given that it is surrounded by sensitive receptors surrounding the site on all sides.

However despite several considerations that are not addressed in the DEIR, it nonetheless concludes less than significant impacts for fire hazard (DEIR p. 4.8-9-15), no impact to emergency facilities, and does not recognize that the Project is located within 0.25 miles of an existing or planned school, or routine transport of hazardous materials.

Each of these conclusions is reached without full assessment of relevant and significant factors to fully evaluate their impacts to the proposed project site and surrounding areas, especially with the recognition of the Project site being within a very high severity fire hazard zone (DEIR p. 4.8-1), especially considering the burden it places on the nearby Fire Station 73 that was not recognized in the DEIR. The Project site was apparently used for fire department helicopter landings, and the Project site are very likely to remove this option for the fire department (DEIR p. 4.8-1).

O5-20
Continued

Next, the DEIR indicates that its compliance with federal, state, and local regulations are sufficient to ensure proper handling of hazardous materials to and from the project site. However this does not attend to the specific design of the project. A determination that regulatory compliance will be sufficient to prevent significant adverse impacts must be based on a project-specific analysis of potential impacts and the effect of regulatory compliance. In *Californians for Alternatives to Toxics v. Department of Food & Agric.* (2005) 136 Cal.App.4th 1, the court set aside an EIR for a statewide crop disease control plan because it did not include an evaluation of the risks to the environment and human health from the proposed program but simply presumed that no adverse impacts would occur from use of pesticides in accordance with the registration and labeling program of the California Department of Pesticide Regulation. See also *Ebbetts Pass Forest Watch v. Department of Forestry & Fire Protection* (2008) 43 Cal.App.4th 936, 956 (fact that Department of Pesticide Regulation had assessed environmental effects of certain herbicides in general did not excuse failure to assess effects of their use for specific timber harvesting project).

With no tailored analysis to the transportation and use of hazards and hazardous materials to a project that is expected to last another two to three years (at least), and with sustained and continued vehicle, commercial truck, and other uses beyond that typical for a film and television studio when the operational demands for the studio could be quite diverse, it is insufficient to only rely on overly-general regulatory requirements and guidelines.

O5-20
Continued

The DEIR must be revised to fully disclose and mitigate the Project's fire and other hazards (including by replacing PDFs with actual mitigation measures), and the EIR must be recirculated to include this new significant information and disclosures.

7. *The DEIR Fails to Adequately Analyze Significant Traffic and Transportation Impacts.*

As was discussed in the prior impact analyses, the DEIR neglects, or appears to neglect the other sensitive receptors including additional churches, parks, schools, fire department, single-family residences, and others. Specifically, the DEIR cites OPR's 2018 indicating a 15% reduction in VMT consistent with SB 743, focusing on thresholds of significance for three types of developments: residential, office, and retail. The DEIR believes that it matches the residential proxy category. Specifically, "A proposed residential project exceeding a level of 15 percent below average existing regional (i.e., City of Santa Clarita) VMT per capita may indicate a significant transportation impact." (DEIR 4.14-10). This is assessed using the outdated 2016 SCAG RTP / SCS Regional Travel Demand Model used to generate statistics, and as such is inappropriate when a more updated model is available (DEIR 4.14-10).

O5-21

Yet, the Project is not necessarily residential but an employment project, and therefore higher thresholds must apply.

To achieve the legislative goals of reducing traffic impacts under SB 743, the Office of Planning and Research ("**OPR**") issued its 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA,[9] which recognizes that areas outside of metropolitan planning areas, especially rural counties, have fewer options for reducing VMT. (OPR Advisory, 15-16.) As such, VMT thresholds may be best determined on a case-by-case basis. (*Ibid.*)

As for non-rural areas, the land use project VMT thresholds recommended by OPR for projects in metropolitan planning organization (MPO) areas are listed below:

[9] See, https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf

- For residential projects, OPR recommends a project threshold of 15 percent below the existing VMT per capita, either measured as a regional VMT per capita or as city VMT per capita. The VMT for the residential metric only includes VMT generated by residents, some of which starts and ends outside the area.

- For office projects, OPR recommends a project threshold of 15 percent below the existing regional VMT per employee. The VMT for the office metric only includes VMT generated by workers employed in the area.

- For retail projects, OPR recommends a project threshold of any net increase in total area VMT. Another VMT per capita threshold option is total VMT per service population (total of residents and employees). (*Ibid.* at 12-14.)

O5-21
Continued

It does not appear the Project meets the applicable thresholds of significance and there is substantial evidence that it actually exceeds those applicable thresholds.

The DEIR also used the CEQA Guidelines Appendix G checklist (a-d) for its assessment, and found that there was no mitigation required for less than significant impacts to (a) and (b) where (a) conflicts with a program plan, etc. and (b) conflicts with CEQA section 15064.3(b), and less than significant impacts with mitigation incorporated to (c) and (d), where (c) increasing hazards due to a geometric design feature, or (d) impact emergency access.

O5-22

The DEIR offers vague assertions regarding compliance with existing policies for bicycle and pedestrian facilities, and does not provide any direct transit service. Also noteworthy is the presence of the adjacent Fire Station 73, and how it would very likely be impacted due to any road closures on Railroad Avenue and other adjacent roadways due to construction or sustained traffic use because of the studio. Yet the only mitigation proposed fails to acknowledge the fire station and it is unclear how the emergency access mentioned would be tailored to the needs of Fire Station 73, and instead makes references to access points that have yet to be constructed, which do not account for access needs prior to such improvements being made (DEIR 4.14-20). This is a critical omission because it impacts a fire station's ability to respond to emergencies, and especially when the construction is expected to last six days a week and nearly the entire day from the hours of 7:00 am to 7:00 pm.

O5-23

Furthermore, because the surrounding sensitive receptors are significantly closer to the proposed Project's permanent operations and transportation use, the impacts to these sensitive receptors will be drastically impacted compared to what is currently suggested and projected in the DEIR, especially given the studio activity that will persist throughout all hours of the day if the project is approved and implemented. This is independent of any nighttime concrete pouring or other construction activities are likely to impact the currently existing sensitive receptors, and sustained film production activities would nonetheless result in significant and unavoidable impacts. O5-24

In light of the DEIR's unsupported assertions that the Project would require no mitigation because the impacts were found to be less than significant, its analysis is incomplete for the DEIR's failure to consider the various factors mentioned above (DEIR p. 4.14-12-21). In reality impacts are likely to be significant even with mitigation incorporated. As such, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). O5-25

Instead there is no indication the DEIR addresses these two requirements, and certainly not the latter since it found less than significant impacts across all evaluated potential impacts. Without attending to these CEQA requirements, the Project should be denied outright, and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

8. *The DEIR Fails to Adequately Analyze Any Biological Impacts.*

When considering or imposing mitigation, lead agencies must ensure there is a "nexus" and "rough proportionality" between the measure and the significant impacts of the project. CEQA Guidelines, § 15126.4, subd. (a)(4)(A); see *Nollan v. Cal. Coastal Commission* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374. All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies. CEQA Guidelines, § 15041. Formulation of mitigation measures shall not be deferred until some future time. CEQA Guidelines, § 15126.4, subd. (a)(B). O5-26

It is important to note the DEIR analyzes and found the high likelihood and actual presence of many special-status species, such as 42 special-status plant species, the California horned lark, San Diego black tailed jackrabbit, California legless lizard, coastal whiptail, coast horned lizard, bell's sage sparrow, loggerhead shrike, burrowing owl, coastal California gnatcatcher, Southern California rufous-crowned sparrow, Cooper's hawk, yellow warbler, raptor nesting birds, sensitive plant communities, and a nearby coastal California gnatcatcher approximately two miles to the south (DEIR 4.3-3-6).

Given the Project site's enormous size, there is a strong likelihood that even more special status-plant or species exist on the Project site. The DEIR relies on several plant and animal surveys to gather evidence of biological impacts; significantly, one of those dates back as far back as 2015. It is therefore also incredibly likely circumstances have changed as to the presence of special status plant and animal species in eight years. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. The City must reevaluate the possibility of special-status plant species in the area in light of these considerations. And this is independent of the efficacy of any oak tree removal and compliance with the City of Santa Clarita's ordinance to ensure effective relocation, removal, and additions.

O5-26
Continued

It is also unlikely that given the sheer number of special status plants and animals on or likely to be on the Project site during construction and beyond that the DEIR's conclusions of no significant impacts are accurate (DEIR 4.3-17-25). When mitigation is required or mentioned in the DEIR, much of it is proposed for some later time, which is disallowed under CEQA as deferred mitigation. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B); *see also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 [EIR failed to provide and commit to specific criteria or standard of performance for mitigating impacts to biological habitats]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management]. Implementing mitigation, even if project specific, cannot be deferred until after Project approval.

9. *The DEIR Fails to Supports its Land Use Analysis with Substantial Evidence.*

O5-27

The DEIR claims consistency of its Land Use Analysis with the City's General Plan (DEIR p. 4.10-1-42). This is in error. Specifically, there are many instances of conflicts between the applicable general plan policies and the Project's Consistency Analysis.

For instance, Policy LU 1.1.3 discourages urban sprawl, but it is unclear how the DEIR concludes the Project site is in-fill since it is currently undeveloped (DEIR 4.10-18). It also fails to maintain natural features since it proposes to develop or at least develop portions of the naturally occurring Palcerita Creek (DEIR 4.10-18). As for Policy LU 1.2.6, it is unclear how a proposed film studio would ensure compatibility with existing rural, equestrian, and National Forest land (DEIR 4.10-19). It is unclear how the Project requiring grading of a portion of a Placerita Creek ridgeline is consistent with Policy LU 1.3.2 which seeks to substantially retain the integrity and *natural* grade elevations of significant natural ridgelines. The Project achieves the opposite. (DEIR 4.10-19). **O5-27 Continued**

The Project also fails consistency with Policy LU 2.2.1 to identify and minimize any diminished use of their aesthetic quality. It is a leap in logic to conclude that since the development of the studio would not occlude the entire view of the hillside, that it is therefore has a sufficiently diminished impact to its aesthetic quality. (DEIR 4.10-20). Policy LU 4.5.3 proposes the use of state-of-the-art technology in furtherance of energy conservation, but the proposed consistency analysis provides for the minimum requirements by mentioning the CALGreen Code (DEIR 4.10.22). The DEIR also mentions consistency with Policy LU 5.2.3, LU 6.4.1 by referring to other Policy considerations (e.g., Policy LU 4.2.1) but does not explain how they are consistent. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. A full analysis is needed. **O5-28**

Policy LU 7.2.3 requires a sustainable water supply prior to approval, while the proposed consistency indicates an "adequate" determination. It is unclear if "sustainable" and "adequate" are synonymous here (DEIR 4.10-25). **O5-29**

Policy LU 7.3.5 demands limited development within flood-prone areas, which the DEIR recognizes as what the Project will do. Despite this, the DEIR nonetheless concludes consistency with this policy even though California has experienced significantly more rain and therefore is even more likely to create the very issues Policy LU 7.3.5 seeks to avoid (DEIR 4.10.25). Policy LU 7.4.1 requires the use of drought tolerant landscaping, and the proposed consistency indicates that a majority of the **O5-30**

proposed trees would be drought tolerant, without indicating whether the remaining trees would offset the drought tolerant trees (DEIR 4.10-26), so the implementation could still result in higher levels of water use. Policy C 3.1.1 requires trip reduction measures to relieve congestion and reduce air pollution, but the Project will necessarily *increase* congestion and air pollution.

O5-30
Continued

These are but a few of the examples of the Project's incongruous analysis of consistency with existing land use policies. As such, the DEIR should be revised to attend more closely to consistency between these policies.

O5-31

10. *The DEIR Fails to Support its Findings on Energy Impacts with Substantial Evidence.*

Pursuant to CEQA Guidelines, section 15126.2, subsection (b), analysis of a project's energy impacts "should include the project's energy use for all project phases (DEIR p. 4.13-29) and components, including transportation-related energy, during construction, and operation." Further, the Guidelines provide that "other relevant considerations may include . . . the project's size, location, orientation, equipment use, and any renewable energy features that could be incorporated into the project." Ibid.

Failing to undertake "an investigation into renewable energy options that might be available or appropriate for a project" violates CEQA. *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 213. Energy conservation under CEQA is defined as the "wise and efficient use of energy." CEQA Guidelines, appen. F, § I. The "wise and efficient use of energy" is achieved by "(1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy resources." *Ibid.*

O5-32

According to Appendix F of the CEQA Guidelines, an environmental document must consider and analyze:

1. The project's energy requirements and its energy use efficiencies;

2. The project's effects on local and regional energy supplies and on requirements for additional capacity;

3. The project's effects on peak-period and base-period energy demands;

4. The degree to which the project complies with existing energy standards;

5. The project's effects on energy resources; and,

6. The project's projected transportation energy use and its overall use of efficient transportation alternatives.

CEQA Guidelines, appen. F.

Basing a Project's energy impacts on its compliance with the California Building Energy Efficiency Standards does not constitute an adequate analysis of energy. *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264-65; see Cal. Code Regs., tit. 24, part 6. Similarly, the court in *City of Woodland* held unlawful an energy analysis that relied on compliance with Title 24, that failed to assess transportation energy impacts, and that failed to address renewable energy impacts. *City of Woodland*, *supra*, 225 Cal.App.4th at pp. 209-13.

First, the DEIR briefly mentions certain practices and equipment which the Project will engage to reduce energy consumption, though the details are vague and uncertain. For example, the DEIR suggests that construction contractors will comply with various federal and statute regulations and recommendations but provides no specifics as to how that would be achieved (DEIR p. 4.5-10).

O5-32
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Second, in addressing long-term energy impacts during operation, the DEIR admits that the project would not directly require excessive long-term operational fuel consumption (DEIR p 4.5-10). It fails, though, to consider renewable energy uses and feasible conservation efforts beyond references that may or may not be implemented or adhering to state-mandated production requirements.

Third, the DEIR concludes that, with respect to operation-related fuel usage, energy impacts would be less than significant. It bases this conclusion on a cursory and conclusory analysis of VMT and the contention that "the amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary." (DIER p. p. 4.5-10). Yet, that the Project would not cause or result in the need for additional measures does not conclusively establish that the Project will not result in significant energy impacts or waste and inefficiency. This line of analysis is neither reasonable nor focused on energy use caused by the Project.

Without assessing the Project's use of energy activities in accordance with the CEQA Guidelines, the DEIR concludes that the Project will not result in wasteful, inefficient, or unnecessary energy use. Consequently, it must be recirculated after broadening its scope and incorporating details, in particular, expanded options for renewable energy solutions.

11. *The DEIR's Project Description Is Inadequate.*

The DEIR must be recirculated because it also lacks an adequate Project description. "[A]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient" environmental document. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 200. "A curtailed or distorted project description may stultify the objectives of the reporting process" as an accurate, stable, and finite project description is necessary to allow "affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance. *Ibid.* at pp. 192-93.

O5-33

CEQA Guidelines, section 15124 requires a project describe in enough detail to allow for evaluation of its potential environmental impacts: (a) the project's precise location and boundaries; (b) a clearly written statement of objectives sought by the proposed project; (c) a description of the project's technical, economic, and environmental characteristics; and (d) a statement describing a list of agencies, permits, and approval which the project expects to use.

The DEIR's Project description does not satisfy this project description requirement by failing to clearly include a statement of objectives. (DEIR 2.0-4-5). Rather, the Project description merely provides some, but not all of the requirements of CEQA Guidelines *Ibid.* Also, as noted above, the Project improperly includes some mitigation measures as project design features thereby avoiding the study of their impacts.

O5-34

Furthermore, the DEIR provides no description of the Project's economic characteristics or clearly written statement and objectives. For these reasons too, the DEIR must be revised and recirculated.

12. *The Project and its CEQA Analysis Violate CEQA for Improper Piecemealing and Incorrect (Inflated) Baseline.*

Project has incrementally expanded over time and will likely continue to expand given its proposed phases, approximately two to three years, throughout the DEIR. Such expansion is suspect and in violation of CEQA's piecemealing prohibition. (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1208–1209 ["The requirements of CEQA cannot be avoided by piecemeal review which results from 'chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences.' (*Bozung v.*

O5-35

Local Agency Formation Com. (1975) 13 Cal.3d 263, 283–284.")].) The danger of piecemealing is many-fold. First, it precludes consideration of impacts of the "whole of an action" under CEQA Guidelines § 15387, as has happened here. As explained by courts:

> "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives...." (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at p. 1454, 263 Cal.Rptr. 340.) Here, the failure to consider the expansion of the wastewater treatment plant as part of the project under consideration resulted in an inaccurate project description and incomplete identification and analysis of the environmental effects of the development project (*Santiago County Water Dist. v. County of Orange, supra,* 118 Cal.App.3d at p. 829, 173 Cal.Rptr. 602.) As stated in **717 *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 166, 217 Cal.Rptr. 893, "[t]he danger of filing separate environmental documents for the same project is that consideration of the cumulative impact on the environment of the two halves of the project may not occur. This danger was here realized."
>
> Thus, because the FEIR did not "adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project," informed decision making was precluded. The FEIR is inadequate as a matter of law. (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at pp. 1454–1455, 263 Cal.Rptr. 340.) The certification by the Board of the FEIR as complete and adequate constituted an abuse of discretion. (*County of Inyo v. City of Los Angeles, supra,* 71 Cal.App.3d at p. 200, 139 Cal.Rptr. 396.)

(*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 734–735.)

O5-35
Continued

Second, piecemealing *alters* the accurate baseline of the CEQA analysis. Thus, under CEQA, the baseline environmental conditions (to measure the Project's impacts against) must be set as early as possible when the Project's environmental review

O5-36

begins. (CEQA Guidelines § 15125(a)(1).) Here, the environmental review of the project began at least in 2019, and likely earlier, given the surveys conducted.

Therefore, the Project's baseline or existing environmental conditions for purposes of CEQA review must go back to the year of 2022 and measure the Project's proposed changes – regardless of when they were proposed (in 2022 or later) – against that lower 2022 baseline. However, as evident from the DEIR, the applicant is not measuring the Project's impacts "as a whole" or as of 2019 and its iterations through 2026 and beyond, but rather focuses on the impacts of the proposed *changes* after the 2022 and 2023 approvals. As such, the Applicant is seeking to alter/inflate the baseline and thereby understate the Project's impacts.

Further, for CEQA purposes, the fact that a project is entitled or is warranted under the general plan is not relevant for the baseline. (CEQA Guidelines § 15125(a)(3) ["An existing conditions baseline shall not include hypothetical conditions such as those that might be allowed, but have never actually occurred under existing permits or plans as the baseline."])

O5-36
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Stated otherwise, the Applicant is trying to use various 2019 baselines and surveys instead more updated or recent baselines post-covid, and thereby *inflates* the baseline through its 2019 approvals and other changes in the surrounding area, in order to minimize and understate the changes it proposes. This is the classic case of trying to *end run* CEQA, where courts agree a *different* baseline must be used. "Of course, were there evidence of an attempted end run around CEQA, use of a different baseline may well be appropriate." (*Hollywoodians Encouraging Rental Opportunities v. City of Los Angeles* (2019) 37 Cal.App.5th 768, 781, fn. 11.) (*See also*, *POET, LLC v. State Air Resources Bd* (2017) 12 Cal.App.5th 52, 83 [use of an inflated baseline had the effect of understating the increase of impacts, requiring reversal]; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953 (*"County of Amador"*) [without an accurate baseline, the "analysis of impacts, mitigation measures and project alternatives becomes impossible."])

Furthermore, an accurate, stable, and finite project description must be the *bona fide* subject of an EIR, an accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR; the defined project and not some different project must be the EIR's bona fide subject. (*Mira Monte Homeowners Assn. v. County of Ventura* (1985) 165 Cal.App.3d 357, 365 [212 Cal.Rptr. 127].) "CEQA compels an interactive process of assessment of environmental impacts and responsive project

O5-37

modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." (Id., at p. 366, internal quotation marks omitted.) (*Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592, emph. added.)

O5-37
Continued

The Project appears to have manifestly piecemealed the Project by initially proposing a smaller scale project for approval now and will likely incrementally increasing the scale and intensity of the Project. The Project represents a classic case of piecemealing where the same applicant fails to accurately disclose the full scope of the project during the initial environmental review and incrementally increases the project after the initial environmental document is approved, in order to avoid analyzing the impacts of the "whole of the action" as CEQA requires. That is what CEQA prohibits and to which the case law is clear. (*Arviv Enterprises, Inc. v. South Valley Area Planning Com.* (2002) 101 Cal.App.4th 1333, 1348–1351 [requiring an EIR for the whole of an action, including *permitted* and even *built out* single family homes and rejecting the applicant's argument about *vested rights,* "Compliance with these existing laws was thus required notwithstanding the City's failures and/or Arviv's misleading project descriptions which may have prevented the City from appreciating the full scope of the proposed development." *Id.* at 1350.])

O5-38

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

A DEIR must identify, fully analyze and mitigate any inconsistencies between a proposed project and the general, specific, regional, and other plans that apply to the project. CEQA Guidelines § 15125(d); *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1566; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 881. There does not need to be a direct conflict to trigger this requirement; even if a project is "incompatible" with the "goals and policies" of a land use plan, the IS/MND must assess the divergence between the project and the plan, and mitigate any adverse effects of the inconsistencies. *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 378-79; *see also Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903 (holding under CEQA that a significant impact exists where project conflicts with local land use policies);

O5-39

Friends of "B" Street v. City of Hayward (1980) 106 Cal.App.3d 988, 998 (held county development and infrastructure improvements must be consistent with adopted general plans) (citing Gov. Code 65302). O5-39 Continued

B. The Proposed Land Use Amendments and Entitlements Conflict with SB 375 and SCAG's 2020 Regional Transportation Plan and Sustainable Communities Strategy

In 2008, Senate Bill 375 amended CEQA and empowered metropolitan planning organizations (MPOs) to enact regional plans to reduce GHG emissions from passenger vehicles. MPOs are required to prepare regional transportation plans (RTP) and sustainable community strategies (SCS) in an effort to meet CARB's GHG reduction goals under SB 375. Gov. Code § 65080(b)(2)(B). SB 375 specifically targets GHG emissions from passenger vehicles by linking land use decisions to transportation planning. *Id.* If the regional SCS/RTP plan does not achieve CARB's GHG reduction targets, then the MPO is required to create an alternative planning strategy (APS) that shows how the targets can be achieved through other mechanism such as alternative development patterns, infrastructure decisions, or other alternative transportation measures or policies that can still achieve CARB's reduction targets. Gov. Code § 65080(b)(2)(I). O5-40

For this Project, the applicable plan is SCAG's 2020-2045 RTP/SCS plan adopted on September 3, 2020.

The DEIR fails to analyze the Project's consistency with SCAG's 2020-2045 RTP/SCS plan given the many unverified and unanalyzed transportation impacts and the strong likelihood of increases to VMT rather than decreases due to the Project's development on land that consists mostly of parking spaces which will be replaced with substantial residential, commercial, and hotel uses, as well as no indication of transit discounts or improvements to accessibility to the Amtrak commuters during construction or how it impacts their commute or use after the Project's completion, or how the Project's significant patronage, resident, and hotel occupant increases would affect demand on the surrounding area and transportation networks. For example, SCAG's 2020 RTP/SCS requires or suggests the following that the Project fails to consider or adopt in the DEIR: O5-41

- Land Use Policies: pursuing affordable housing or providing more transportation options for short trips;[10]
- Transportation Network Strategies: providing transit fare discounts; providing transit integration strategies such as integration of active transportation and transit by improving pedestrian access and bicyclist access;[11]
- Transportation Demand Management Strategies: encourage use and implementation of TDM strategies such as rideshare incentives, parking management, parking subsidies for carpoolers, incentives for telecommuting, integrated mobility hubs, or additional investments in active transportation infrastructure;[12] and
- Clean Vehicle Technology Strategies: use of neighborhood electric vehicles (NEVs), and anticipating shared mobility platforms, car-to-car communication or automated vehicle technologies.[13]

O5-41
Continued

The DEIR fails to demonstrate consistency with the most recent SCAG 2020-2045 RTP / SCS Plan and should be revised to meet its goals and policies.

IV. CONCLUSION

Based on the foregoing, we respectfully request the City deny the Project, its DEIR, and order the applicant to revise the Project to ensure its consistency with all applicable laws and regulations as detailed above, as well as to study the "whole of the action" and use the accurate *bona fide* project description and baseline for purposes of CEQA review. "CEAQ contemplates *serious* and not superficial or pro forma consideration of the potential environmental consequences of a project. *Leonoff v. Monterey County Bd. Of Supervisors* (1990) 222 Cal.App.3d 1337, 1347, 272 Cal.Rptr. 372; emphasis added; *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 593, fn. 3.

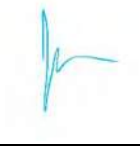
O5-42

If the City has any questions or concerns, please do not hesitate to contact our office.

[10] SCAG (Sep. 2020) 2020 RTP/SCS, pp. 25-36.
[11] *Id.*
[12] *Id.*
[13] *Id.*

LETTER O5 Continued

Sincerely,



Jason A. Cohen
Attorneys for Southwest Mountain
States Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

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(949) 887-9013
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Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

O5-43

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

O5-43
Continued

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin

Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

O5-43
Continued

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

O5-43
Continued

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

O5-43
Continued

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
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San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Mininum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4103	1.4103
2	**12-1-2021**	**2-28-2022**	1.3613	1.3613
3	**3-1-2022**	**5-31-2022**	1.1985	1.1985
4	**6-1-2022**	**8-31-2022**	1.1921	1.1921
5	**9-1-2022**	**11-30-2022**	1.1918	1.1918
6	**12-1-2022**	**2-28-2023**	1.0774	1.0774
7	**3-1-2023**	**5-31-2023**	1.0320	1.0320
8	**6-1-2023**	**8-31-2023**	1.0260	1.0260

9	**9-1-2023**	**11-30-2023**	1.0265	1.0265
10	**12-1-2023**	**2-29-2024**	2.8857	2.8857
11	**3-1-2024**	**5-31-2024**	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4091	1.4091
2	**12-1-2021**	**2-28-2022**	1.3329	1.3329
3	**3-1-2022**	**5-31-2022**	1.1499	1.1499
4	**6-1-2022**	**8-31-2022**	1.1457	1.1457
5	**9-1-2022**	**11-30-2022**	1.1415	1.1415
6	**12-1-2022**	**2-28-2023**	1.0278	1.0278
7	**3-1-2023**	**5-31-2023**	0.9868	0.9868
8	**6-1-2023**	**8-31-2023**	0.9831	0.9831

9	**9-1-2023**	**11-30-2023**	0.9798	0.9798
10	**12-1-2023**	**2-29-2024**	2.8757	2.8757
11	**3-1-2024**	**5-31-2024**	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

Letter No. O5
Jason A. Cohen
Southwest Mountain States Regional Council of Carpenters
c/o Mitchell M. Tsai
139 South Hudson Avenue, Suite 200
Pasadena, CA 91101

Response to Comment No. O5-1

Please refer to Response to Comment Nos. O1-1 through O1-4 above.

Response to Comment No. O5-2

The comment describes the purpose of CEQA and the CEQA Guidelines. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-3

The comment cites several CEQA case law examples and Public Resources Code (PRC) and CEQA Guidelines sections regarding the preparation of an EIR and states that the City should prepare an EIR for the Project. The CEQA document that was circulated for public review between April 6, 2023, and May 22, 2023, is a Draft EIR that was prepared for the Project. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-4

The comment cites several PRC and CEQA Guidelines sections and a case law regarding recirculation of an EIR when substantial changes to the Draft EIR or new information about the Project occurs. However, the comment presents no information or substantial evidence about any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-5

The comment states that the Draft EIR improperly labeled mitigation measures as project design features. Project design features (PDFs) are features of the Project that would be included in the construction and operation of the Project that would be implemented above and beyond compliance with specific regulations and requirements. The description and inclusion of PDFs in the Draft EIR is not improper, as alleged by the commenter, but rather aids in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss “the measures which are proposed by project proponents to be included in the project.”

The PDFs used in the air quality analysis are features that would be incorporated into the construction of the Project and are not required by current regulations. PDFs typically provide a benefit or a reduction to impacts. For example, the example of photovoltaic systems and solar panels not required by City code would result in a reduction in electrical consumption from the grid, as well as a reduction in greenhouse gas (GHG) emissions. Therefore, the inclusion of the PDFs identified in Section 4.2, Air Quality, of the Draft EIR, is not considered mitigation because

it is part of the construction design of the Project, and there are no current regulations requiring specific construction equipment to be used. No changes to the Draft EIR are made based on this comment.

Response to Comment No. O5-6

The comment reiterates the statement that the Draft EIR improperly labeled mitigation measures as PDFs with specific examples from Section 4.2, Air Quality, of the Draft EIR, and asserts that the PDFs provide an unwarranted reduction in Project emissions. However, the application of all Tier 3 equipment in the CalEEMod emissions analysis does not result in meaningfully different emissions than the default construction equipment fleet in the model, as shown in **Table O5-1-1**:

TABLE O5-1
CONSTRUCTION CRITERIA POLLUTANT EMISSIONS USING TIER 3 EQUIPMENT

Emissions Source	Maximum Emissions (pounds/day)[a]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Tier 3 Fleet Emissions	43	53	104	<1	26	7
Maximum CalEEMod Default Fleet Emissions	44	49	99	<1	27	11
South Coast AQMD Regional Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
VOC = volatile organic compounds; NO_x = nitrogen oxide; CO = carbon monoxide; SO_2 = sulfur dioxide;
PM_{10} = particulate matter 10 micrometers in diameter or less; $PM_{2.5}$ = fine particulate matter 2.5 micrometers or less in diameter
[a] Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the South Coast AQMD.
Source: Rincon Consultants, Inc., June 2023.

Similar emissions between the Tier 3 equipment fleet and the default equipment fleet result from the default fleet including some Tier 4 equipment. Given that the PDFs provide that Tier 3 equipment be used at a minimum, it is likely that some Tier 4 equipment would also be used on-site (similar to the default fleet mix), resulting in less emissions than presented in the Draft EIR. Regardless, without or with the PDFs that require a minimum of Tier 3 equipment, Project emissions would be below the South Coast AQMD thresholds of significance and, therefore, less than significant.

Response to Comment No. O5-7

The comment asserts that the air quality impact analysis is flawed because it only looked at the residential uses nearby and did not take into account other potential sensitive receptors. While there may be other sensitive receptors in the area, the air quality analysis focused on residential sensitive receptors that are located within 1,000 feet of the Project Site. Religious institutions would be considered residential receptors assuming that a religious leader lives on the premises. School site receptors are impacted less than residential receptors as students/staff are present on-site for a fraction of the day and, thus, have less exposure than residences at which the analysis assumes the resident is present for the whole day (i.e., a 24-hour per day exposure). Additionally, the analysis focused on the receptors located immediately adjacent to the Project Site as the dispersion of pollutants generated by the Project was assumed to have the greatest impact on these receptors. Therefore, if the impacts on the receptors are less than significant, then those receptors that are farther away would experience less impacts, which would also be less than significant.

This 1,000-foot radius is typical of air quality analysis of sensitive receptors and is based on the recommendations of the California Air Resources Board in their Air Quality and Land Use Handbook A Community Health Perspective.[11] The Handbook identifies that the pollutant exposures can be reduced by as much as 80 percent using the buffer distances. Therefore, while there may be other sensitive receptors that are nearby, the distance between the Project Site and the receptors indicates that impacts to these receptors would be substantially less than the impacts identified in the analysis for the receptors identified within 1,000 feet of the Project Site. Therefore, the air quality analysis in the Draft EIR adequately addressed impacts to sensitive receptors.

Response to Comment No. O5-8

The comment asserts that Project Design Feature PDF-PUB-1, specifically as related to the roadway extension, should have been identified as a mitigation measure instead of a PDF as it may have impacts on the environment. The roadway referred to in the PDF is internal to the Project Site and, as such, part of the Project's site plan and internal circulation. Impacts associated with all internal roadways have already been accounted for in the analyses of the Project's construction impacts. In addition, the PDF reiterates the fire code requirements. Accordingly, implementation of the PDF would not have impacts of its own.

Response to Comment No. O5-9

The comment asserts that the analyses in the Draft EIR used PDFs and upgrades to adjacent streets and intersections to reduce impacts and avoid scrutiny of whether those proposed Project improvements would be efficient or whether they will have impacts of their own in need of mitigation.

As identified on page 4.14-18 in Section 4.14, Transportation, of the Draft EIR, to provide for a conservative analysis, Project Design Feature PDF-TA-1 was not included in the VMT analysis, which still showed that the Project would result in a less-than-significant VMT impact. Additionally, all of the physical improvements noted in Project Design Feature PDF-TA-1 (e.g., bicycle facilities and intersection improvements) are part of the Project, and the potential impacts of such improvements were evaluated as part of the Project's impacts in the Draft EIR.

Similarly, as identified on page 4.17-12 in Section 4.17, Wildfire, of the Draft EIR, the fire modeling conducted for post-development conditions showed that fire potential on the Project Site would be lower than existing conditions due to fire safety requirements that would be implemented by the Project, including those in the 2022 California Fire Code, which have been adopted by reference in the Los Angeles Fire Code; Santa Clarita Municipal Code (SCMC); 2022 California Building Code; and Public Resources Code. Project Design Features PDF-WF-1 through PDF-WF-4 are some of the specific procedures proposed to be implemented by the Project above and beyond regulatory compliance to ensure safety of workers during Project construction and Project occupants/employees during operation.

Response to Comment No. O5-10

The comment asserts that the City violated CEQA by labeling mitigation measures as project design features. CEQA only requires mitigation measures if substantial evidence exists of

[11] California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

potentially significant environmental impacts. In particular, CEQA Guidelines Section 15126.4(a)(4)(A) states that there must be an essential nexus between the mitigation and a legitimate government interest (i.e., potential significant impact). As discussed in Response to Comment No. O5-9 above, without the PDFs or mitigation measures, the Project would result in less-than-significant impacts related to air quality, public services, VMT, and wildfire. Accordingly, the construction techniques, TDM features, and fire safety procedures proposed by the Project are appropriately shown as PDFs and not mitigation measures.

Response to Comment No. O5-11

The comment asserts that the Draft EIR failed to support its findings with substantial evidence but provides no specific evidence to support this claim. Similarly, the comment notes that when new substantial evidence shows that an impact identified as less than significant in the Draft EIR has the potential to be significant, the EIR must consider and resolve the conflict in the evidence. However, the commenter provides no evidence that any of the less-than-significant impacts identified in the Draft EIR would be significant. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-12

The comment states that the Draft EIR failed to support its findings on GHG impacts with substantial evidence. The comment proceeded to cite the CEQA Guidelines with respect to analyzing GHG impact. The comment asserts that the cited sections of the CEQA Guidelines "tie qualitative measures to quantitative results." The comment also states that the Project's cumulative contribution should be discussed as part of the analysis. The comment does not directly challenge the contents of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-13

As stated in the City's General Plan Economic Development Element, the City seeks to enhance the quality of life for its residents by providing opportunities to work closer to home. Thus, the City has established a goal of a 2 to 1 jobs/housing balance and supports projects that would create two jobs for every new household.[12] Implementation of the Project would improve the City's job/housing balance to 1.23 to 1 or potentially up to 1.28 to 1 with the addition of indirect employment opportunities. Moreover, the Project would create jobs in the entertainment industry, which is one of the City's four targeted industry sectors. Thus, the Project would have a cumulative positive contribution to employment in the Santa Clarita Valley, which is considered one of the housing-rich areas of Los Angeles County, as it would create more high-quality jobs for the City's residents. With regard to the comment that the Project would be growth inducing, see Section 6.3, Growth Inducing Impacts, of the Draft EIR, which evaluated the Project's potential job creation and related growth inducement.

Response to Comment No. O5-14

The comment states that the Draft EIR failed to demonstrate consistency with the legislative plans identified as GHG reduction plans. By example, it states that it is unclear how such a large studio and facility with constant daily traffic is consistent with the City's General Plan Conservation and

[12] City of Santa Clarita, City of Santa Clarita General Plan – Economic Development Element, June 2011, p. 14.

Open Space Element Goal CO 8, which is intended for energy efficiency and reducing energy and natural resource consumption and reduce emissions of GHGs, as well as reaching targeted reductions of GHG emissions consistent with AB 32, SB 375, and other implementing regulations when the Project is going to increase emissions from its current use. Further, the comment alleges that the Draft EIR failed to explain how compliance with the RTP/SCS, Scoping Plan Update, Energy Plan, and General Plan led to a less-than-significant impact and specifically offsetting the increased GHG emissions due to the increased traffic in connection with the construction of the studio and the use of them indefinitely thereafter. It also suggests that the updates to the plans subsequent to the drafting of the Draft EIR were not accounted for.

The goal of the General Plan, as well as the Scoping Plan and RTP/SCS, is not to preclude new development or to provide a mechanism for offsetting all of the GHG emissions from new development implemented before there is sufficient technology and infrastructure available to do so. The goal of these plans is to provide a means for individual development projects to aid the State in moving towards the ultimate reduction goals. New land uses are not required to offset all new GHG emissions from the project, only to ensure that new projects are not conflicting with the measures implemented in the plans to reduce GHG emissions.

Pages 4.7-14 through 4.7-17 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, identified Project-specific actions that would support the implementation of the identified plans. With respect to the specific example of Goal CO 8, the goal identifies several objectives and policies that would filter down to individual projects and their ability to comply, as shown on page 4.7-9 of the Draft EIR. As specifically stated on page 4.7-17 of the Draft EIR, Project-specific actions that would directly support the City's achievement of Goal CO 8 include "the Project would be required to comply with the applicable requirements of the CALGreen Code and California Energy Code, the City's Green Building Standards Code, and the City's Energy Conservation Code. The Project would be constructed in compliance with the 2022 Title 24 (CALGreen and Energy Code) standards and would be located within walking distance to the Jan Heidt Newhall Metrolink Station. In addition, the Project would include on-site amenities (private park, picnic areas, food truck stations), bicycle parking spaces, and electrical golf carts, which would contribute to vehicle trip reductions." These directly demonstrate what the Project includes to reduce GHG emissions consistent with what is identified in Goal CO 8.

Finally, with respect to the updates of GHG reduction programs/plans, the only plan updated subsequent to the initial draft of the GHG analysis was the 2022 Scoping Plan Update. The 2022 Scoping Plan Update and the Project's compliance with it are included in the GHG analysis on page 4.7-14 of the Draft EIR.

Response to Comment No. O5-15

The comment alleges that the Draft EIR failed to explain or analyze how compliance with the GHG Reduction Plan (page 4.7-6 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR) will lead to a less-than-significant impact. The comment further suggests that the lead agency should explain how implementing the particular requirements of the plan, regulation, or program ensures the Project's incremental contribution to the cumulative effect is not cumulatively considerable.

There are two GHG plans/regulations discussed on page 4.7-6 of the Draft EIR—the 2022 Update to the Climate Change Scoping Plan and Senate Bill (SB) 375 (2008 Sustainable Communities and Climate Protection Act). The Draft EIR addressed the Project's compliance with the 2022

Scoping Plan Update in detail on page 4.7-14. SB 375 requires CARB to develop regional GHG emissions reduction targets from passenger vehicles and directs the State's metropolitan planning organizations to prepare sustainable communities strategies. Pages 4.7-15 through 4.7-17 of the Draft EIR demonstrate compliance with the 2020-2045 RTP/SCS. As discussed in detail in Response to Comment No. O5-16 below, GHG emissions are cumulative by nature. These plans provide GHG emissions reductions through goals and policies that need to be met by the City and State to achieve the various reduction goals, which will ultimately contribute to the reduction of GHG emissions at the City and State levels. By demonstrating compliance with these cumulative plans, the Project ultimately would not contribute to a cumulatively considerable increase in GHG emissions.

Response to Comment No. O5-16

The comment contends that the Draft EIR failed to evaluate cumulative GHG impacts and that the Draft EIR needed to conduct an accurate cumulative GHG impact analysis. As stated on page 4.7-18 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, "The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts." As GHG emissions are inherently cumulative, the analysis of the Project as presented in the Draft EIR represents a cumulative analysis.

Response to Comment No. O5-17

The comment alleges that the Draft EIR was deficient related to deferral of mitigation, the exclusion of some sensitive receptors, the exclusion of sensitive receptors from the LST analysis, and a failure to analyze cumulative air quality impacts.

The Draft EIR does not defer mitigation; in the instance identified in the comment (Draft EIR p. 4.2-19), there are no potentially significant impacts identified, and, as such, no mitigation measures were required. The reference in the Draft EIR to the Project being required to comply with South Coast AQMD is not a reference to the formulation of mitigation measures but rather expressing that the Project is required to comply with South Cost AQMD's established rules and regulations.

As detailed in Response to Comment No. O5-7 above, the analysis adequately addresses sensitive receptors within a 1,000-foot radius of the Project Site and does not need to identify every receptor within the general area.

With respect to the comment's assertion that cumulative impacts are not properly addressed, the South Coast AQMD is the primary agency responsible for assuring that the National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively) are attained and maintained in their jurisdiction. In developing thresholds of significance for air pollutants, the South Coast AQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As evaluated in the analysis of Threshold 4.2(b) on pages 4.2-19 through 4.2-21 in Section 4.2, Air Quality, of the Draft EIR, the Project would not exceed the South Coast AQMD's thresholds of significance. Consequently, the Project would not result in a cumulatively considerable increase in any air pollutants. The analysis of cumulative impacts

in the Draft EIR follows the methodology established by the South Coast AQMD. Therefore, no additional analysis to assess cumulative impacts is necessary or appropriate.

Response to Comment No. O5-18

The comment states that the analysis of construction and operational noise level increases in the Draft EIR is flawed because it only considered some nearby sensitive receptors. The comment asserts that the noise analysis in the Draft EIR is incomplete and potentially misleading because it omitted the list of additional sensitive receptors provided in the comment.

The sensitive receptors in the Draft EIR were chosen because they represented the closest sensitive receptors to the Project Site. In addition, the focus was on residential uses because they have the strictest noise standards within the SCMC. By analyzing these receptors and determining noise levels at these receptor locations that are lower than the City's noise standards, the public can interpret that sensitive receptors farther away would result in lower noise levels. Therefore, as with the closest sensitive receptors to the Project Site, noise impacts to sensitive receptors located farther away would also be less than significant. CEQA does not require an exhaustive list of potential sensitive receptors in a 1,000-foot radius if it is possible to interpolate potential noise impacts from the analysis of nearby sensitive receptors. For example, the comment references the Santa Clarita Motel, a commercial use that is located at a similar distance from the Project Site as Noise Receiver OFF9 (mobile home park to the west) in Table 4.11-3. This use would face similar noise levels from the Project but also has a higher noise standard per the SCMC of 80 dBA during the daytime and 70 dBA during the nighttime and, therefore, is exposed to noise levels much lower than the standards. Many of the sensitive receptors listed in the comment are much farther away from the Project (e.g., the Old Town Newhall Library located 1,000 feet to the south) and, due to distance attenuation and shielding from uses in between, would be exposed to negligible noise levels from the Project.

The comment makes particular note of Picasso's Playmates Creative Center. This use is approximately 100 feet south of the Project Site. The center is not a full school or daycare facility; its schedule posted on June 6, 2023, showed only five classes total for 1.5 hours each during a 7-day period.[13] In addition, as a commercial use, it would be subject to a higher noise standard per the SCMC of 80 dBA during the daytime. Even using the stricter residential daytime noise limit of 65 dBA, per Figure 4.11-3 in Section 4.11, Noise, of the Draft EIR, the center would be subject to operational noise levels of 40 dBA from the Project, which is well below the noise standards. Given the aforementioned, the Draft EIR is not incomplete and potentially misleading due to focusing on the nearest, most sensitive receptors.

Response to Comment No. O5-19

The comment states that the primary noise sources identified in the Draft EIR were vehicle traffic and railroad activity and asserts that the measurements taken during the early to mid-afternoon were not sufficient to fully analyze noise impacts, given that construction is expected to occur from 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on Saturdays. The comment states that "an agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data."

[13] Picasso's Playmates Creative Center, Hours/Class Schedule, https://picassoplaymates.com/, accessed June 6, 2023.

The comment does not provide recommendations for what they believe would be the adequate amount of measurements. As discussed in Section 4.11, Noise, of the Draft EIR, six 15-minute ambient noise level measurements were taken over the course of 2.5 hours at and near the Project Site, covering sensitive receptor locations north, east, and west of the Project Site. These measurements captured a typical noise environment for a weekday at the Project Site and provided relevant data for the public to understand ambient noise conditions in the area. For example, the measurements provided context that the more developed, urban area to the west of the Project Site has a louder ambient noise level than the more suburban areas to the north and east. The comment also incorrectly states that the date measurements were sampled was not provided in the Draft EIR. As stated on page 4.11-5 in Section 4.11, Noise, of the Draft EIR, measurements were taken on November 18, 2021 (Thursday).

The comment restates multiple times that the Draft EIR did not look at all possible sensitive receptors. Please see Response to Comment No. O5-18, which addresses the analysis of other sensitive receptors.

The comment describes the size of the Project and infers in an overarching comment that the Project would result in significant and unavoidable noise impacts because of its large size. The comment also asserts that that the Draft EIR did not properly follow CEQA Guidelines Sections 15091 and 15093 to address the significant and potentially unavoidable noise impacts that would occur. As discussed in Section 4.11, Noise, of the Draft EIR, and the Project's Noise and Vibration Study provided as Appendix J of the Draft EIR, the analysis found that construction and operational noise and vibration impacts would be less than significant, contrary to the commenter's assertion. Therefore, CEQA Guidelines Sections 15091 and 15093 would not be applicable to the Project. Please see Section 4.11, Noise, and Appendix J of the Draft EIR for the substantial evidence to support the impact conclusions.

The comment also expresses concern that the noise generated by a massive film and television studio developed on a vacant site and the resulting traffic would result in significant noise impacts. Additionally, the commenter is concerned about the duration of Project construction. As previously stated, Section 4.11, Noise, and the Noise and Vibration Study concluded that all noise impacts would be less than significant.

The comment references nighttime construction work that is proposed; however, as stated in Section 4.11, Noise, of the Draft EIR, the Project would comply with the allowed construction hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday pursuant to SCMC Section 11.44.080.

Lastly, the commenter claims that the Draft EIR minimizes noise impacts by focusing on the closest residences to the Project Site, thereby underestimating the impact on other areas. The comment's conclusion asserts that the Draft EIR's noise impact analysis is severely flawed, understated, and needs to be revised to comply with CEQA. The comment states that the missing information in the Draft EIR, which presents more severe impacts, warrants recirculation. Please see Response to Comment No. O5-18, which addresses the analysis of other sensitive receptors. As discussed above, the analyses in Section 4.11, Noise, of the Draft EIR and the Noise and Vibration Study are fully compliant with requirements of CEQA and found that construction and operational noise and vibration impacts would be less than significant based on substantial evidence. Accordingly, the Draft EIR analysis is not missing information that would result in severe impacts, and recirculation is not warranted.

Response to Comment No. O5-20

The comment asserts that the Draft EIR failed to adequately analyze hazards and hazardous materials impacts and that the Draft EIR relied on the Phase I Environmental Site Assessment (ESA) report prepared for the Project Site to assess the hazard and hazardous materials impacts. The Draft EIR properly utilized information presented in the Phase I ESA for the purpose of establishing baseline conditions, as well as identifying the historical uses of the Project Site and potential for environmental conditions to exist on-site and nearby sites.

The comment also claims that with no tailored analysis of transportation and use of hazardous materials, relying on overly-general regulatory requirements and guidelines is not sufficient to prevent significant adverse impacts. The comment proceeds to cite two cases related to the evaluation of risks to the environment and human health resulting from the use of pesticides and herbicides. As identified in Section 4.8, Hazards and Hazardous Materials, of the Draft EIR, Project construction and operation would involve the limited transport, storage, use, and disposal of hazardous materials related to typical construction practices and building/landscaping maintenance. Specifically, the Project may require the use of hazardous materials, including cleaning products; paints, solvents, adhesives, and other chemical materials used in building maintenance, interior improvements, and set building; automotive lubricants; small combustion engine fuels and lubricants; pesticides and herbicides; and electronic waste, all of which are typical of commercial land uses. As stated in the Draft EIR, level of hazardous materials usage required for a commercial development would not present a significant threat to the environment because the Project would not include the routine transport, use, or disposal of hazardous materials at volumes or concentrations that require special provisions, permits, or approvals, such as those required for certain industrial land uses or agricultural/forestry resources as addressed in the cited cases. Accordingly, unlike those projects, the Project would not involve the spraying of toxic chemicals (particularly on private property objected to by the land owner or occupant) or hazardous materials over a large area to eradicate pests or competing plant species that may have a potential impact on human health and sensitive biological resources.

In response to the comment regarding the failure of the Draft EIR to recognize the Project's location within 0.25 mile of an existing or planned school, the discussion of Project impacts under Threshold 4.8(c) on page 4.8-11 of the Draft EIR specifically identified Newhall Elementary School within 0.25 mile and Placerita Junior High School and William S. Hart High School within 0.30 mile of the Project Site. The discussion also included reference to the analysis of local concentration levels of air pollutants, which determined that emission levels during construction and operation of the Project at Newhall Elementary School, the closest school to the Project Site, would not result in hazardous conditions to nearby schools.

The comment also states that the Project Site's location in or near a very high fire hazard severity zone is critical, especially given that the Project Site is surrounded by sensitive receptors on all sides. It also mentions that, "despite several considerations that are not addressed in the DEIR, it nonetheless concludes less than significant impacts for fire hazard,… no impact to emergency facilities." Impacts involving wildland fires were addressed under Threshold 4.8(g) on pages 4.8-13 and 4.8-14 of the Draft EIR and extensively in Section 4.17, Wildfire, of the Draft EIR. The comment did not specify what several considerations were not addressed in the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

The Draft EIR fully disclosed the Project's impacts related to wildfire and hazard/hazardous materials, and recirculation is not warranted.

Response to Comment No. O5-21

The comment claims that the Draft EIR failed to adequately analyze significant traffic and transportation impacts and that the Project does not appear to meet the applicable threshold of significant. The comment also claims there is substantial evidence but does not provide any information to support this claim.

The Draft EIR transportation analysis followed the City's guidelines outlined in *Transportation Analysis Updates in Santa Clarita* (TAU), which establishes the procedures and thresholds for transportation analyses in the City.

Table 8 of the TAU contains the following thresholds for various project types:

> Residential Project — Project exceeds 15 percent below citywide Baseline VMT for Home-Based VMT per capita.
>
> Employment (Commercial or Industrial) Project — Project exceeds 15 percent below citywide Baseline VMT for Home-Based Work VMT per employee.
>
> Regional Retail Project — Project results in a net increase in total VMT in comparison to the citywide Baseline VMT.

The VMT analysis for the Project is summarized in the Transportation Assessment (Appendix L of the Draft EIR) on pages 47 through 50 and in Appendix C of the Transportation Assessment. The analysis followed the TAU and determined a Work VMT per employee of 14.0, which was consistent with the required threshold set forth in the TAU. Draft EIR comments appear to interpret this result as meaning that employees on average live 7 miles from the Project Site (half of 14.0 miles, which is the average work VMT per employee). However, the "work VMT per employee" is more than simply the calculation of the distance between the employee's home and workplace. First, the average work VMT per employee is calculated based on the "home-based work attraction" trip types, which are one-way trips. In other words, the distance of 14.0 miles is the average *one-way* VMT. Second, the calculation of the work VMT per employee also takes into account the employee mode split (i.e., the number of employees that utilize carpool, transit, bike, or walk).

A sample VMT calculation is presented below in **Table O5-21-1** to help demonstrate the relationship between employee trip length and VMT. The VMT calculation shows the employee trip distribution characteristics for a business with 10 employees. These 10 employees are spread out throughout the metropolitan region, living between 1 and 20 miles from their workplace. These employees live an average of 8.7 miles away from their workplace. When work VMT per employee is calculated from the average employee trip length, the mode of travel and the vehicle occupancy is taken into account. For example, **Table O5-21-1** shows that eight of the 10 employees get to work in an automobile (with six driving and two as passengers). One employee takes the bus to work and the employee who lives the closest to the workplace walks or bikes to work. The VMT is generated by the employees that drive their cars to work. The two employees that take the bus and walk/bike to work do not generate VMT because they are not driving a vehicle to work. Thus, in this example, the 10 employees live a total of 87 miles from work (at an average of 8.7 miles

each), but they generate an average of only 5.9 work VMT per employee for their cumulative home-to-work morning trip.

Table O5-21-1
EMPLOYEE VMT EXAMPLE

Employee	Distance Home to Work (miles)	Travel Mode	Vehicle Miles Traveled
1	13	Drive	13
2	2	Drive	2
3	13	Car Passenger	0
4	1	Walk/Bike	0
5	8	Drive	8
6	6	Drive	6
7	4	Bus	0
8	10	Car Passenger	0
9	20	Drive	20
10	10	Drive	10
Total	**87**		**59**
Average	87/10 = 8.7		59/10 = 5.9
Source: Gibson Transportation Consulting, Inc., 2023.			

In the case of the Project, as discussed in the Transportation Assessment (Appendix L of the Draft EIR), the Project would generate an average of 14.0 work VMT per employee, which coincidentally matches the TAU threshold of 14.0 VMT per employee for the City of Santa Clarita.

Further, although the Project would include a TDM Program, the VMT analysis in the Draft EIR did not account for the Project's TDM measures and is, therefore, conservative. The TDM Program would further reduce total VMT and work VMT per employee.

The 2016 SCAG RTP/SCS Regional Travel Demand Model was the most recent model available when the Project analysis was underway and was approved for use in the study by the City.

The VMT analysis summarized in Table 10 on page 50 of the Transportation Assessment shows that the Project does not exceed the appropriate threshold of Work VMT per Employee and, therefore, does not have a significant VMT impact.

Response to Comment No. O5-22

The comment states that the Draft EIR used the Appendix G checklist of the CEQA Guidelines for the assessment of transportation impacts and found that there was no mitigation required for less-than-significant impacts related to conflicts with programs and plans or the VMT analysis and less-than-significant impacts with mitigation incorporated related to increasing hazards due to a geometric design feature and emergency access. Section 4.14, Transportation, of the Draft EIR determined that the Project's impacts related to conflicts with programs and plans, VMT analysis, increasing hazards due to a geometric design feature, and emergency access were all less than significant, and, as such, no mitigation measures are required. CEQA only requires mitigation measures if substantial evidence exists of potentially significant environmental impacts. In

particular, CEQA Guidelines Section 15126.4(a)(4)(A) states that there must be an essential nexus between the mitigation and a legitimate government interest (i.e., potential significant impact). It is not clear to which "less than significant impacts with mitigation incorporated to (c) and (d)" the comment was referring. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-23

The first part of the comment states that the Draft EIR offered vague assertions regarding compliance with existing policies for bicycle and pedestrian facilities and that the Project does not provide any direct transit service. Section 4.14, Transportation, of the Draft EIR, included a comprehensive discussion of bicycle, pedestrian, and transit facilities associated with the Project. More specifically, the discussion on page 4.14-16 of the Draft EIR states that "For bicyclists, the Project would provide a multi-use path on 13th Street along the Project frontage, bicycle parking, and end-of-trip facilities, including lockers and showers. In regard to pedestrians, the Project would provide … access to the Jan Heidt Newhall Metrolink Station, located less than 0.5 mile south of the Project Site." The Project would provide 170 bicycle parking spaces, including 145 long-term spaces and 25 short-term spaces. In addition, Section 4.10, Land Use and Planning, of the Draft EIR, provided a discussion of the Project Site as being well-served by a variety of nearby mass transit options, including rail and bus lines. The Project would promote walking and use of bicycles by constructing a Class I trail along the Project frontage at 12th Street, Arch Street, and 13th Street. In addition, the Project would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to provide a link for pedestrians and bicyclists between the Project Site and the Jan Heidt Newhall Metrolink Station, which is located approximately 2,500 feet south of the Project Site and where there are stops for the Santa Clarita Transit (SCT), Amtrak Thruway Bus, and Antelope Valley Transit Authority (AVTA) services; and the Old Town Newhall dining and entertainment district.

The second part of the comment is related to the proximity of the Project Site to Fire Station 73. As acknowledged in Section 4.13, Public Services, of the Draft EIR, Project construction would result in temporary sidewalk and lane closures that may affect evacuation routes. However, construction would not impede the LACoFD from maintaining its response times. Furthermore, construction activities are temporary in nature and full access to all roadways would be restored upon completion of the Project. Project coordination with LACoFD has been on-going; LACoFD has not expressed any concerns regarding the Project's potential impacts to its access or emergency services.

The comment also mentions that "the only mitigation proposed fails to acknowledge the fire station and it is unclear how the emergency access mentioned would be tailored to the needs of Fire Station 73, and instead makes reference to access points that have yet to be constructed, which do not account for access needs prior to such improvements being made." It is not clear what mitigation is referred to in the comment and what access needs exist prior to implementation of Project improvements. Fire Station 73 is located on the west side of Railroad Avenue between 14th and 15th Streets, on the opposite side of the railroad tracks and Railroad Avenue from the Project Site. The Project would not include any road or lane closures in the vicinity of the Fire Station or any new driveways or other roadway, sidewalk, or bikeway improvements on the Fire Station's block. Please refer to Response to Comment No. A4-3 regarding the Project's compliance with all applicable LACoFD code and ordinance requirements for construction,

access, water mains, fire flows, and fire hydrants at LACoFD building plan check review and prior to the issuance of City of Santa Clarita building permits and certificates of occupancy.

Response to Comment No. O5-24

The comment asserts that because the surrounding sensitive receptors are significantly closer to the proposed Project's permanent operations and transportation use, the impacts to these receptors will be "drastically impacted compared to what is currently suggested and projected" in the Draft EIR. However, the comment does not identify a specific impact or which impacts the commenter believes would be greater than those disclosed in the Draft EIR or would result in significant and unavoidable impacts. All of the impact analyses contained in the Draft EIR complied with the requirements of CEQA Guidelines Section 15064 and were based on substantial evidence. Moreover, the presence of sensitive receptors in the vicinity of the Project Site was explained and considered throughout the environmental impact analysis in the Draft EIR, including in Sections 4.1, Aesthetics, 4.2, Air Quality, 4.8, Hazards and Hazardous Materials, 4.11, Noise, and 4.17, Wildfire. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-25

The comment makes unspecific claims that in light of the unsupported assertions made in the Draft EIR that the Project would require no mitigation because the impacts were found to be less than significant, the City is required to make a finding that there is no feasible way to lessen or avoid the significant effect or to make a statement of overriding considerations.

All of the impact analyses contained in the Draft EIR complied with the requirements of CEQA and CEQA Guidelines Section 15064 and were based on substantial evidence contained in the Draft EIR and its appendices, upon which the determination of less than significant with or without mitigation was made. As the EIR does not identify any environmental impacts of the Project to be significant and unavoidable, the comment regarding CEQA Guidelines Sections 15091 and 15093 is not relevant, and the City is not required to determine either that (a) there is no feasible way to lessen or avoid a significant effect or (b) to specifically identify expected benefits from the Project that will outweigh the significant environmental impacts of the Project. Pursuant to CEQA Guidelines Section 15064(f)(5), "argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous or evidence that is not credible, shall not constitute substantial evidence." The comment does not present (1) information or substantial evidence that any of the Project's environmental impacts would be significant and unavoidable, (2) evidence about any specific impact area that would require denial of the Project, or (3) any new information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-26

The comment states that given the Project's size, there is a strong likelihood that more special status species exist on the Project Site. The comment also states that the Draft EIR relies on several plant and animal surveys to gather evidence and that it is likely that circumstances have changed as to the presence of special status plant and animal species in eight years. The comment states that the City must reevaluate the possibility of special status plant species. The comment asserts that a large number of special status plants and animals are likely to be on the Project Site during construction and beyond and states that the Draft EIR's conclusions of no

significant impacts to special status plants or animals are unlikely to be accurate. The comment further states that mitigation proposed for impacts to sensitive vegetation and jurisdictional resources are proposed for some later time, which is disallowed under CEQA as deferred mitigation.

The comment is correct that the Draft EIR relies on numerous biological studies conducted on the Project Site, one of which dates back to 2015. However, the potential for special status plant and wildlife species to occur was evaluated following updated database queries and a field reconnaissance survey on January 20, 2022. The analysis was also informed by floristic rare plant surveys conducted within the Project Site in 2015, 2020, 2021 and 2022, as well as protocol burrowing owl and coastal California gnatcatcher surveys conducted between April and June 2022.[14,15] Accordingly, the Draft EIR's evaluation of special status plant and wildlife species potential to occur relied on data collected within the last year. The evaluation of existing conditions within the Project Site is valid as it is based on surveys conducted over multiple years, including multiple site surveys and database research conducted in 2022, around the time the baseline for the Draft EIR analysis was established with the publication of the Project's NOP. However, to be responsive to the commenter's concerns, an updated California Natural Diversity Database query was conducted to identify additional special status species added to the database following the January 2022 query. The only additional special status species identified by the query was Crotch's bumble bee. The updated query is included as **Attachment 4** to this Final EIR. Please see Response to Comment No. A1-5 for evaluation of Crotch's bumble bee, which was not a special status species at the time the Project's NOP was published but was reinstated as a candidate species for listing under the CESA by the California Fish and Game Commission on September 30, 2022. Please also see Response to Comment No. A1-9 for impacts to SSC species.

With regard to the comment's assertion that, "[w]hen mitigation is required or mentioned in the Draft EIR, much of it is proposed for some later time, which is disallowed under CEQA as deferred mitigation," it is unclear which mitigation measure(s) the comment is referring to. Mitigation Measure MM-BIO-1 identifies best management practices to be followed during construction, Mitigation Measure MM-BIO-2 requires a biological monitor to present during initial ground disturbance or vegetation removal activities, and Mitigation Measure MM-BIO-3 establishes requirements for the protection of nesting birds during construction. As these three mitigation measures establish specific procedures to be followed during construction, they cannot be implemented at this time but must occur during construction and are, thus, not improperly deferred. Mitigation Measures MM-BIO-4 and MM-BIO-5 establish minimum compensatory mitigation requirements for impacts to sensitive natural communities and jurisdictional areas and require the preparation of a Restoration Plan to identify specifically how the replacement habitat would be acquired/restored. Mitigation Measure MM-BIO-4 identifies the minimum content requirements for the Restoration Plan and Mitigation Measures MM-BIO-4 and MM-BIO-5 collectively require the Restoration Plan be approved by the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, and the Regional Water Quality Control Board prior

[14] Rincon Consultants, Inc., Burrowing Owl Habitat Assessment and Focused Survey Results for the Blackhall Studios Project, July 8, 2022 (see Appendix H of the Shadowbox Studios Project Biological Resources Assessment provided as Appendix D of the Draft EIR).

[15] Rincon Consultants, Inc., Blackhall Property Project Coastal California Gnatcatcher Focused Survey Report, May 26, 2022 (see Appendix I of the Shadowbox Studios Project Biological Resources Assessment provided as Appendix D of the Draft EIR).

to initiating construction or any site disturbance. As the mitigation measures included in the Draft EIR commit the Project to mitigating the potentially significant impacts and include specific performance standards that must be achieved, none of the mitigation measures are improperly deferred.

Response to Comment No. O5-27

The comment asserts that the Draft EIR errs in concluding consistency of its Land Use Analysis with the City's General Plan. The comment claims many instances of conflict between the applicable General Plan policies and the Project's consistency analysis.

In regard to the comment's claim that the Project is not an infill site, CEQA (PRC Section 21061.3) defines an infill site as follows:

> "Infill site" means a site in an urbanized area that meets either of the following criteria:
>
> (a) The site has not been previously developed for urban uses and both of the following apply:
>
> (1) The site is immediately adjacent to parcels that are developed with qualified urban uses, or at least 75 percent of the perimeter of the site adjoins parcels that are developed with qualified urban uses and the remaining 25 percent of the site adjoins parcels that have previously been developed for qualified urban uses.
>
> (2) No parcel within the site has been created within the past 10 years unless the parcel was created as a result of the plan of a redevelopment agency.
>
> (b) The site has been previously developed for qualified urban uses.

CEQA (PRC Section 21072) defines qualified urban uses as any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of these uses.

Based on these definitions, the Project Site is considered an infill site as it has not been previously developed for urban uses; it is immediately adjacent to qualified urban uses, specifically residential uses on the north and east, commercial uses to the south, and a mix of commercial and residential uses and the Metrolink right-of-way on the west; and no parcel within the Project Site has been created within the past 10 years.

A large portion of the Project Site, specifically south of Placerita Creek, has a General Plan designation and a corresponding zoning designation of MXN (Mixed Use Neighborhood), which allows for studio use with a Conditional Use Permit. Accordingly, development of the Project on a site designated and zoned for MXN would not result in urban sprawl and, as such, would not be inconsistent with Policy LU 1.1.3.

In regard to the comment about Placerita Creek, the Project does not propose any development in Placerita Creek. However, the Project proposes to stabilize the banks of Placerita Creek with buried rock bank protection that would be vegetated to maintain the natural appearance of the

creek; there would be no change to the existing floor of the creek bed, which would remain in its natural, soft bottom condition.

In regard to the comment about how the Project would be compatible with existing rural, equestrian, and National Forest land, as explained in the consistency analysis, the Project would be required to undergo several City processes prior to Project approval, including architectural design review, development review, landscape plan review, and hillside review, to ensure that the Project complies with the requirements of the Placerita Canyon Special Standards District and is compatible with the surrounding area, particularly the residential uses immediately east of the Project Site in Placerita Canyon. The Project would utilize the MWD right-of-way behind the residences that front on Alderbrook Drive as a plant nursery, which would provide both visual screening and an orderly transition between these residential uses and the Project. Finally, the Project site is not within or in proximity to a National Forest. As such, the Project would not be inconsistent with Policy LU 1.2.6.

In regard to the comment about the ridgeline, grading would be limited to the base of the ridgeline. The integrity and natural grade elevation of the ridgeline would be retained, and, as such, the Project would not be inconsistent with Policy LU 1.3.2.

Response to Comment No. O5-28

The comment asserts that the Project would not be consistent with Policy LU 2.2.1 and that it was a leap in logic to conclude that impacts to aesthetic quality would not be significant because Project development would not obstruct the entire view of the hillside. However, the comment does not provide specific reasons or provide substantial evidence that the aesthetic quality of the ridgeline would be diminished. As previously noted, the Project would not disturb the area beyond the base of the ridgeline north of Placerita Creek and would maintain the ridgeline as natural open space. As such, the Project would not be inconsistent with Policy LU 2.2.1.

The comment also questions the consistency analysis related to Policy LU 4.5.3, which promotes the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features. The Project's compliance with the California Building Standards Code and the CALGreen Code would achieve the intent of the policy through the implementation of energy-efficient light fixtures and building materials and high-efficiency plumbing fixtures. As such, the Project would not be inconsistent with Policy LU 4.5.3.

In addition, the comment claims that the Draft EIR did not explain how the Project is consistent with Policies LU 5.2.3 and LU 6.4.1 and cites a case (*Sundstrom v County of Mendocino*) to suggest that the City has avoided its responsibility to prepare a proper environmental analysis by failing to gather relevant data. However, the comment does not provide specific reasons or provide substantial evidence that the City avoided its responsibility to comply with CEQA. Nonetheless, Policy LU 5.2.3 relates to locating non-polluting businesses that provide employment opportunities in proximity to neighborhoods to encourage walking to work. The Draft EIR referred to Policy LU 4.2.1, which relates to the pursuit of clean industries that provide opportunities for local residents. The consistency analysis provided for Policy 4.2.1 states that the Project would contribute to the expansion of clean industries (i.e., non-polluting businesses as mentioned in Policy LU 5.2.3) in the City that would provide job/employment opportunities for local residents. Similarly, Policy LU 6.4.1 relates to preservation of historic buildings, while Policy LU

2.2.2 (not Policy LU 2.2.1 as mentioned in the comment) relates to the preservation of the historical integrity of sites and areas with historical or cultural value to the community. The consistency analysis provided for Policy LU 2.2.2 states that the Project would not have direct or indirect impacts to any historical resources as no historic resources were identified on the Project Site and that no historic buildings are located in the immediate vicinity of the Project Site or have a direct line-of-sight of the Project Site. The discussions provided in Policies LU 4.2.1 and LU 2.2.2 were applicable and sufficiently addressed Policies LU 5.2.3 and LU 6.4.1, respectively.

Response to Comment No. O5-29

The comment questions whether "sustainable" and "adequate" are synonymous when discussing the Project's consistency with Policy LU 7.2.3. The water supply assessment (WSA) prepared by SCV Water for the Project included an additional analysis of its water supply reliability beyond the normal, single dry-year, and multiple dry-year analyses provided for in its 2020 Urban Water Management Plan (UWMP). This additional analysis was done with the 2021 update to SCV Water's Water Supply Reliability Plan. The Plan considered the anticipated increase in demand due to growth and climate change (through 2050). The Plan concluded that (1) current supplies along with active conservation would be sufficient until 2040, (2) additional investments in the programs and facilities identified in the UWMP would be sufficient to achieve reliability through 2050, and (3) alternative programs to those contained in the UWMP could offer different paths to achieve reliability or if implemented in addition to the UWMP could provide additional supplies in excess of demand. Accordingly, SCV Water concluded in its WSA for the Project that it "has evaluated the long-term water needs (water demand) within its service area and has compared these needs against existing and planned water supplies. Demand projections are based on applicable population projections and county and city land use plans, and account for conservation as well as climate change impacts and other relevant factors. This WSA concludes that the total projected water supplies available to the SCV Water service area over the 30-year projection during normal, single-dry, and multiple-dry year (5-year drought) periods are sufficient to meet the projected demands associated with the proposed Shadowbox Studios Development Project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Valley, provided that SCV Water continues to utilize available SWP Table A Amounts, and continues to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of the total water supply portfolio and management approach to long-term water supply planning and strategy."[16] Based on SCV Water's assessment and the Project's compliance with regulatory requirements related to water conservation, it could be inferred that SCV Water has demonstrated a sufficient and sustainable water supply to adequately serve the Project.

Response to Comment No. O5-30

The comment questions the Project's consistency with Policy LU 7.3.5. The comment notes that Policy LU 7.3.5 demands limited development within flood-prone areas. However, the comment fails to note the intent of the policy, which is to minimize downstream impacts. The consistency analysis provided a discussion of Project features, including proposed hydromodifications, to

[16] SCV Water, Water Supply Assessment – Shadowbox Studios Development, October 5, 2022, pp. 5-12 to 5-14.

minimize, if not avoid, downstream impacts. As such, the Project would not be inconsistent with Policy LU 7.3.5.

The comment also questions the Project's consistency with Policy LU 7.4.1, which requires the use of drought tolerant landscaping. The comment fails to acknowledge that the landscape plans and irrigation systems would be required to comply with the City's Design Guidelines and SCMC requirements. In addition, the WSA prepared by SCV Water considered landscape irrigation in the water demand estimates for the Project, as shown in Table 2-6 of the WSA (included in Appendix M of the Draft EIR). As such, the Project would not be inconsistent with Policy LU 7.4.1.

The comment also questions the Project's consistency with Policy C 3.1.1, which requires new development projects to implement trip reduction measures to relieve congestion and reduce air pollution from vehicle emissions. The comment claims that the Project will necessarily increase congestion and pollution but does not provide substantial evidence to support this claim. In addition to the Project's proximity to transit, including the Jan Heidt Newhall Metrolink Station approximately 2,500 feet south of the Project Site, the Project will incorporate several TDM features, including, but not limited to, bicycle parking and amenities, on-street bicycle facilities, and pedestrian network improvements, to contribute to the reduction in VMT and vehicle trips to and from the Project Site. These actions are consistent with City and State of California transportation and GHG policies and objectives. As such, the Project would not be inconsistent with Policy C 3.1.1.

Response to Comment No. O5-31

The comment claims that the policies identified in Comment Nos. O5-27 through O5-30 are a few examples of the Project's incongruous analysis of consistency with existing land use policies and that the Draft EIR should be revised to attend more closely to consistency between policies. Based on the discussions provided in Response to Comment Nos. O5-27 through O5-30, the Project would not be inconsistent with any of the policies mentioned in the comments, and no revisions to the Draft EIR are warranted.

Response to Comment No. O5-32

The comment contends that the Draft EIR failed to support its findings on energy impacts with substantial evidence. The comment cites portions of the CEQA Guidelines and alleges that the Draft EIR did not assess the use of energy in accordance with CEQA. The comment states that basing a project's energy impact on its compliance with the California Building Code is not an adequate analysis of energy and references a court case that found an energy analysis to be inadequate that relied on compliance with Title 24 but failed to assess transportation energy impacts and to address renewable energy impacts. The energy analysis in the Project's Draft EIR addressed both transportation and renewable energy along with compliance with Title 24.

The comment lists the following six criterion from Appendix F of the CEQA Guidelines that are used to inform an energy analysis:

1. The project's energy requirements and its energy use efficiencies;
2. The project's effects on local and regional energy supplies and on requirements for additional capacity;
3. The project's effects on peak-period and base-period energy demands;

4. The degree to which the project complies with existing energy standards;
5. The project's effects on energy resources; and
6. The project's projected transportation energy use and its overall use of efficient transportation alternatives.

The energy analysis in the Draft EIR accounts for all criteria based on the known Project information. For construction activities, with respect to Criteria 1, 2, 3, and 5, the analysis identified that the Project would consume 608,836 gallons of diesel fuel and 353,662 gallons of gasoline. Consumption in Los Angeles County in 2020 was 2,770 million gallons of gasoline and 299 million gallons of diesel fuel. The Project would consume less than 0.1 percent of the total 2020 consumption and would, therefore, not add excessive demand on the existing supply. With respect to Criterion 4, a construction contractor has not yet been identified for the Project, and, therefore, it would be speculative to specify the exact nature by which construction would comply with the regulatory requirements. However, regardless of the contractor, construction would be required to adhere to State and local requirements and regulations. Regarding Criterion 6 and construction transportation energy use, the use of Tier 3 equipment would make the equipment more efficient than the older Tier 1 or Tier 2 equipment, and compliance with fuel efficiency standards and idling prohibitions along with diversion of construction debris would result in the efficient use of energy necessary to construct the Project.

For operational activities, with respect to Criteria 1 2, 3, and 5, operations would require approximately 1,088,710 gallons of gasoline and 192,858 gallons of diesel for transportation fuels, 8,460,355 kilowatt-hours (kWh) of electricity, and 37,009 therms of natural gas. This would result in less than 1 percent of the County's gasoline or diesel use, 0.01 percent of Southern California Edison's (SCE) total electricity demand, and less than 0.01 percent of Southern California Gas Company's (SoCalGas) demand. The Project would not result in energy demand that would exceed current supply. With respect to Criterion 4, the analysis summarizes how the Project would comply with the 2022 California Energy Code and the CALGreen Code in addition to installing photovoltaic (PV) systems and solar panels which would offset the Project's energy demand by producing renewable energy on-site. The evaluation of Criterion 6 on page 4.5-11 in Section 4.5, Energy, of the Draft EIR, quantified energy consumption and explained that Project amenities, such as bicycle parking/facilities, EV charging infrastructure, and proximity to public transit, would reduce the transportation fuel consumption by encouraging the use of alternative transportation methods.

As summarized above, the Draft EIR adequately addressed all of the criteria identified in the comment, and the analysis supports the Draft EIR's conclusion that the Project would not result in significant impacts related to energy.

Response to Comment No. O5-33

The comment asserts that the Draft EIR should be recirculated because it lacked an adequate Project Description. The comment cites CEQA Guidelines Section 15124, which identifies the required information in the description of a project. Page 2.0-1 in Section 2.0, Project Description, of the Draft EIR, clearly identified the precise location and boundaries of the Project Site. As stated, "the Project Site is located in the southwestern portion of Santa Clarita, in the Newhall community, approximately 2 miles east of Interstate 5 (I-5), 2 miles west of the Antelope Valley Freeway (State Route 14), and 2 miles south of the Santa Clara River…. the Project Site is

situated at the northeastern corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; a railroad right-of-way (ROW) and Railroad Avenue on the west; Metropolitan Water District (MWD) ROW on the east; and slopes maintained by the adjacent residential uses to the north." These descriptions were supplemented by Figure 2-1, Regional Location Map, and Figure 2-2, Project Vicinity Map, pursuant to CEQA Guidelines Section 15124(a). A clearly written statement of objectives sought by the Project, along with the underlying purpose of the Project, were included on pages 2.0-4 and 2.0-5 in Section 2.0, Project Description, of the Draft EIR, pursuant to CEQA Guidelines Section 15124(b). A description of the Project's characteristics, including its design and architecture related to the sound stage buildings, support building, office building and parking structure, catering and mechanical buildings, campus main entrance, open space and landscaping; parking, access, and availability of public transit in the Project area; lighting and signage; security features; off-site improvements; sustainability features; and anticipated construction activities and schedule were presented on pages 2.0-4 through 2.0-24, along with Figures 2-4 through 2-14 (site plan, elevation plans, conceptual landscape plans), in Section 2.0, Project Description of the Draft EIR, pursuant to CEQA Guidelines 15124(c). The requested permits and approvals from the City and other agencies were identified on pages 2.0-24 and 2.0-5 in Section 2.0, Project Description of the Draft EIR, pursuant to CEQA Guidelines 15124(d).

The comment presents no information or substantial evidence about the description of the Project that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-34

The comment asserts that the description of the Project did not satisfy the requirements of CEQA by failing to clearly include a statement of objectives. As identified in Response to Comment No. O5-33 above, a clearly written statement of objectives sought by the Project, along with the underlying purpose of the Project, were included on pages 2.0-4 and 2.0-5 in Section 2.0, Project Description, of the Draft EIR, pursuant to CEQA Guidelines Section 15124(b).

The comment also asserts that the Project improperly included some mitigation measures as PDFs to avoid the study of their impacts. As identified in Response to Comment No. O5-5, PDFs are features of the Project that would be included in the construction and operation of the Project that would be implemented above and beyond compliance with specific regulations and requirements. The description and inclusion of PDFs in the Draft EIR is not improper, as alleged by the commenter, but rather aids in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss "the measures which are proposed by project proponents to be included in the project."

Response to Comment No. O5-35

The comment claims that the Project is in violation of CEQA's piecemealing prohibition and cites several CEQA case law examples. The comment states that "the Project has incrementally expanded over time and will likely continue to expand give its proposed phases." It is not clear what the basis of this comment is as the Project has been downsized from its original proposal with 28 soundstages that would be constructed on the north and south sides of Placerita Creek and a six-level parking garage to 19 sound stages constructed on the south side of Placerita

Creek and a five-level parking garage. It is also not clear what is being piecemealed since the Project, as presented in the Draft EIR, has been analyzed as the "whole of an action" to be constructed in one phase. The Draft EIR also analyzed the proposed off-site improvements that would be necessary for the operation of the Project.

The comment presents no other information or substantial evidence about any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-36

The comment claims that because of the piecemealing, the CEQA analysis used an incorrect baseline that has been altered. The Notice of Preparation (NOP) for the Draft EIR was published on March 29, 2022, and the baseline conditions used in the CEQA analysis were established at that time, pursuant to CEQA Guidelines Section 15125.

The comment also claims that the applicant used various 2019 baselines and surveys through its 2019 approvals and cites several CEQA case law examples. It is not clear what Project approvals are being referred to as no entitlements or other approvals were issued in 2019 by the City that would allow the Project or any portion thereof to proceed.

The comment presents no other information or substantial evidence about any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-37

The comment states that an accurate, stable, and finite project description must be the subject of an EIR and cites several CEQA case law examples. As discussed in Response to Comment No. O5-33 above, the description of the Project presented in Section 2.0, Project Description, of the Draft EIR, complied with the requirements of the CEQA Guidelines and provided all the information specified in CEQA Guidelines Section 15124.

The comment presents no other information or substantial evidence about any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-38

As with Comment No. O5-35, the comment claims that the Project has been piecemealed by initially proposing a small scale project and will likely incrementally increase the cake and intensity of the Project. Please refer to Response to Comment No. O5-35 above.

Response to Comment No. O5-39

The comment claims that the Project violated the State planning and zoning laws, as well as the City's General Plan, and cites several CEQA case law examples.

The comment presents no other information or substantial evidence about any specific violation that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-40

The comment asserts that the proposed land use amendment and entitlements conflict with SB 375 and SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) stating that SB 375 specifically targets GHG emissions from passenger vehicles by linking land use decisions to transportation planning. The comment further states that if the 2020-2045 RTP/SCS does not achieve CARB's GHG reduction targets, then the Metropolitan planning organization (MPO) is required to create an alternative planning strategy to show how the targets can be achieved through other mechanisms. Finally, the comment states that the applicable plan is the SCAG's 2020-2045 RTP/SCS plan adopted on September 3, 2020. This comment does not specifically address any portion of the Draft EIR and only provides background information on SB 375 and the 2020-2045 RTP/SCS. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-41

The comment alleges that the Draft EIR failed to demonstrate consistency with the most recent SCAG 2020-2045 RTP/SCS "given the many unverified and unanalyzed transportation impacts and the strong likelihood of increases to VMT rather than decreases due to the Project's development on land that consists mostly of parking spaces which will be replaced with substantial residential, commercial, and hotel uses, as well as no indication of transit discounts or improvements to accessibility to the Amtrak commuters during construction or how it impacts their commute or use after the Project's completion, or how the Project's significant patronage, resident, and hotel occupant increases would affect demand on the surrounding area and transportation networks."

The Project is the development of a film studio on currently vacant land. There would be no removal of existing parking or development of residential or hotel uses. The comment does not address the current Project identified in the Draft EIR. However, the Project's compliance with the 2020-2045 RTP/SCS is detailed in both Section 4.2, Air Quality, of the Draft EIR (page 4.2-18) and Section 4.7, Greenhouse Gas Emissions, of the Draft EIR (page 4.7-15). The details of the analysis identified the Project's VMT increases. The Project's demand on the transportation network was discussed in Section 4.14, Transportation, of the draft EIR (page 4.14-13). As demonstrated in these sections of the Draft EIR, the Project would be consistent with the 2020-2045 RTP/SCS.

Response to Comment No. O5-42

The comment requests that the City deny the Project and the Draft EIR and order the applicant to revise the Project to ensure consistency with all applicable laws and regulations, as well as study the "whole of an action." However, as discussed in the responses above, the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. The comment presents no other information or substantial evidence about any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for

recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O5-43

The comment discusses the potential reductions in VMT and, thereby, GHG emissions from including local hiring requirements. This comment does not address the Project or Draft EIR specifically. Thus, the comment does not identify an potential inadequacies of the Draft EIR but is rather intended to demonstrate how, in general, requiring local workers during construction could reduce GHG emissions. Accordingly, the comment is noted, and no additional response is warranted.

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LETTER O6

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May 22, 2023

Via Email and Overnight Mail

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Re: Comments on Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109; SCH Number 2022030762)

Dear Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") to comment on the Draft Environmental Impact Report ("DEIR") prepared by the City of Santa Clarita ("City") for the Shadowbox Studios Project (Master Case 21-109) ("Project") proposed by L.A. Railroad 93, LLC ("Applicant").

The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and approximately 37,500-square feet of catering and specialty service areas. The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north. **O6-1**

Based on our review of the DEIR and available supporting documentation, we conclude that the DEIR fails to comply with the requirements of the California **O6-2**

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Environmental Quality Act ("CEQA")[1]. The DEIR fails to disclose and/or adequately analyze many of the Project's significant environmental impacts and fails to propose feasible and enforceable mitigation measures to reduce those impacts to a less than significant level, as required by CEQA.

As explained in these comments, there is substantial evidence that the Project will result in significant unmitigated impacts relating to air quality, health risks, noise, biological impacts, transportation and greenhouse gas ("GHG") emissions. The City may not approve the Project until it revises the DEIR to adequately analyze and mitigate the Project's significant direct, indirect and cumulative impacts and incorporates all feasible mitigation measures to avoid or minimize these impacts to the greatest extent feasible.

O6-2 Continued

We reviewed the DEIR, its technical appendices, and available reference documents with the assistance of air quality expert James Clark, noise expert Ani Toncheva, biological resources expert Shawn Smallwood, and transportation expert Norman Marshall. The comments and qualifications of these experts are attached hereto[2] and are incorporated by reference as if set forth herein. The City must respond to each expert's comments separately and fully.

O6-3

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes Santa Clarita residents Corey Wood, Greg Lewis and Michael de Francis, the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their

O6-4

[1] Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs ("CEQA Guidelines") §§ 15000 et seq. ("CEQA Guidelines").

[2] **Exhibit A**, May 20, 2023 Letter from James J.J. Clark to Richard M. Franco, Adams Broadwell Joseph & Cardozo re: Comment Letter on Draft Environmental Impact Report (DEIR) Shadowbox Studios Project, SCH NO. 2022030762 (hereinafter "Clark Comments"); **Exhibit B**, May 19, 2023 Letter from Ani Toncheva, Wilson Ihrig to Richard M. Franco, Adams Broadwell Joseph & Cardozo re: City of Santa Clarita Shadowbox Studio Project Santa Clarita, California Review and Comment on DEIR (hereinafter "Toncheva Comments"); **Exhibit C**, May 18, 2023 Letter from Shawn Smallwood to Richard M. Franco, Adams Broadwell Joseph & Cardozo re: Shadowbox Studios Project (hereinafter "Smallwood Comments"); **Exhibit D**, May 19, 2023 Letter from Norman Marshall, Smart Mobility to Richard M. Franco re: Comments on the Shadowbox Studios Project (hereinafter "Marshall Comments").

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members, their families, and other individuals who live and work in the City of Santa Clarita and surrounding areas.

Individual members of CREED LA and its member organizations live, work, recreate, and raise their families in the City of Santa Clarita and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist onsite.

O6-4 Continued

In addition, CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

II. LEGAL BACKGROUND

CEQA requires public agencies to analyze the potential environmental impacts of their proposed actions in an EIR.[3] "The foremost principle under CEQA is that the Legislature intended the act to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[4]

O6-5

CEQA has two primary purposes. First, CEQA is designed to inform decisionmakers and the public about the potential significant environmental effects of a project.[5] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'"[6] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the

[3] PRC § 21100.
[4] *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal ("Laurel Heights I")* (1988) 47 Cal.3d 376, 390 (internal quotations omitted).
[5] Pub. Resources Code § 21061; CEQA Guidelines §§ 15002(a)(1); 15003(b)-(e); *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517 ("[T]he basic purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").
[6] *Citizens of Goleta Valley,* 52 Cal.3d at p. 564 (quoting *Laurel Heights I*, 47 Cal.3d at 392).

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public and its responsible officials to environmental changes before they have reached ecological points of no return."[7] As the CEQA Guidelines explain, "[t]he EIR serves not only to protect the environment but also to demonstrate to the public that it is being protected."[8]

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring consideration of environmentally superior alternatives and adoption of all feasible mitigation measures.[9] The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced."[10] If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment" to the greatest extent feasible and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[11]

O6-5
Continued

While courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference."[12] As the courts have explained, a prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process."[13] "The ultimate inquiry, as case law and the CEQA guidelines make clear, is whether the EIR includes enough

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[7] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; *see also Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*") (purpose of EIR is to inform the public and officials of environmental consequences of their decisions *before* they are made).
[8] CEQA Guidelines § 15003(b).
[9] CEQA Guidelines § 15002(a)(2), (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at p. 564.
[10] CEQA Guidelines § 15002(a)(2).
[11] PRC § 21081(a)(3), (b); CEQA Guidelines §§ 15090(a), 15091(a), 15092(b)(2)(A), (B); *Covington v. Great Basin Unified Air Pollution Control Dist*. (2019) 43 Cal.App.5th 867, 883.
[12] *Berkeley Jets*, 91 Cal.App.4th at p. 1355 (emphasis added) (quoting *Laurel Heights I*, 47 Cal.3d at 391, 409, fn. 12).
[13] *Berkeley Jets*, 91 Cal.App.4th at p. 1355; *see also San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722 (error is prejudicial if the failure to include relevant information precludes informed decision making and informed public participation, thereby thwarting the statutory goals of the EIR process); *Galante Vineyards*, 60 Cal.App.4th at p. 1117 (decision to approve a project is a nullity if based upon an EIR that does not provide decision-makers and the public with information about the project as required by CEQA); *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946 (prejudicial abuse of discretion results where agency fails to comply with information disclosure provisions of CEQA).

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detail 'to enable who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'"[14]

O6-5
Continued

III. THE CITY FAILED TO PROVIDE TIMELY ACCESS TO DEIR REFERENCE DOCUMENTS, WHICH MAY NECESSITATE FURTHER COMMENT SUBMISSION

The City failed to make all documents referenced or relied upon in the DEIR available for public review during the DEIR's entire public comment period, thereby truncating the public comment period in violation of CEQA. As a result, CREED LA has been unable to fully analyze the DEIR and its supporting documents during the current public comment period. We therefore provide these preliminary comments on the DEIR and reserve our right to submit supplemental comments on the DEIR at a future date.

O6-6

On April 27, 2023, we submitted to the City a letter requesting access to "any and all documents referenced or relied upon" in the DEIR, excluding the DEIR and its appendices.[15] On May 8, the City responded that "you will be contacted on or before May 22, 2023 [i.e., the last day to submit public comments on the DEIR], with the availability of the records responsive and appropriate for disclosure."[16]

On May 12, 2023, we requested that the City extend the public comment period due to the City's failure to provide access to all of the DEIR reference documents.[17] The City did not respond substantively to the request for extension; rather, Community Development Director Jason Crawford responded via email "to confirm it has been received and will be included with the item for consideration of the Planning Commission at the 5/16 meeting."[18] Mr. Crawford's email was the first notification we received from the City that the Project was on the agenda for the May 16, 2023 Santa Clarita Planning Commission hearing, despite our previous written request for such notice.[19] On May 16, 2023, we reiterated our request for an

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[14] *Sierra Club,* 6 Cal.5th at p. 516 (quoting *Laurel Heights I*, 47 Cal.3d at 405).
[15] **Exhibit E,** April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Immediate Access to Documents Referenced or Relied Upon in the Draft Environmental Impact Report-Shadowbox Studios Project.
[16] **Exhibit F,** May 8, 2023 email from City of Santa Clara to Sheila Sannadan.
[17] **Exhibit G,** May 12, 2023 letter from Richard M. Franco, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project.
[18] **Exhibit H,** May 12, 2023 email from Jason Crawford to Alisha Pember.
[19] **Exhibit I,** April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Mailed Notice of Actions and Hearings Related to Shadowbox Studios Project.

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extension of the DEIR public review and comment period in a letter to the Planning Commission,[20] and appeared in person at the Planning Commission hearing to make the same request. The Planning Commission took no formal action on our request for extension, meaning the public comment deadline remained May 22, 2023. Each of CREED LA's requests for extension were made pursuant to CEQA, which requires that "all documents referenced in the draft environmental impact report" be available for review and "readily accessible" during the entire comment period.[21]

Without access to the DEIR reference documents during the entire public comment period, CREED LA and other members of the public have been precluded from having a meaningful opportunity to comment on the DEIR as required by CEQA. Without access to these documents, CREED LA and other members of the public have been unable to fully evaluate the accuracy of the City's impact analysis, or the efficacy of the City's proposed mitigation measures.

O6-6
Continued

CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[22] The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[23] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[24]

On May 15, 2023, the City produced a number of the DEIR reference documents requested, with only a week remaining in the DEIR public comment period. This belated production deprived CREED LA of timely access to the documents, and did not cure the City's failure to make these documents available during the entire public comment period. By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City has denied CREED LA and members of the public the ability to meaningfully comment on the potentially significant environmental

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[20] **Exhibit J,** May 16, 2023 letter from Richard M. Franco to City of Santa Clarita Planning Commission re Agenda Item #1- May 16, 2023 Planning Commission Hearing on Shadowbox Studios Project (Master Case 21-109).
[21] PRC §§ 21092(b)(1) (emphasis added); 14 Cal. Code Regs. ("CCR") § 15087(c)(5).
[22] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).
[23] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[24] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

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impacts of the Project in violation of CEQA's procedural mandates. Even with the belated document production, the size of the DEIR and the Project's complexity have made it difficult to effectively review and comment on the DEIR by the current comment deadline of May 22, 2023.

O6-6
Continued

IV. THE DEIR FAILS TO ADEQUATELY ESTABLISH THE EXISTING BASELINE FOR BIOLOGICAL RESOURCES IMPACTS

The DEIR contains serious flaws in its disclosure of baseline environmental conditions related to the presence of wildlife, including special status species, on the Project site. As a result, the DEIR lacks the necessary baseline information against which to measure the Project's impacts to biological resources.

The existing environmental setting is the starting point from which the lead agency must measure whether a proposed project may cause a significant environmental impact.[25] CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective.[26] Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate, meaningful evaluation of environmental impacts. The courts have clearly stated that "[b]efore the impacts of a project can be assessed and mitigation measures considered, an [environmental review document] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined."[27]

O6-7

Based on Dr. Smallwood's review of the DEIR and his associate's site visit, he found the DEIR's description of the Project site's baseline conditions to be deficient in several important respects.

First, the biological survey performed by the City's consultants on January 22, 2022 was incomplete and not fully documented. As Dr. Smallwood points out, the report setting forth the consultants' findings[28] lacks crucial information such as when the survey began and its duration. Without that context, it is difficult to assess the completeness of the survey effort. "Unreported and unknown to the

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[25] *See, e.g.*, *Communities for a Better Env't v. S. Coast Air Quality Mgmt. Dist.* (March 15, 2010) 48 Cal.4th 310, 316; *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278 ("*Fat*"), citing Remy, et al., Guide to the Calif. Environmental Quality Act (1999) p. 165.
[26] CEQA Guidelines §15125(a) (emphasis added); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453 ("*Riverwatch*").
[27] *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.
[28] DEIR, Appendix D.

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reader is whether the 23 species of vertebrate wildlife detected on site represented an impressive number after 15 minutes of survey or a dismal number after a day-long survey. Reporting that 23 species were detected in the absence of the context of survey effort is misleading."[29] By way of comparison, Dr. Smallwood's associate detected nearly twice this number of vertebrate wildlife in only 3.5 hours, using binoculars from locations around the site's perimeter.[30]

In addition, the City's consultant reported that 23 *additional* wildlife species were detected during separate surveys for burrowing owl and California gnatcatcher, but those additional sightings were not included in the DEIR, which reports that only 23 species *total* were detected.[31] "Considering the additional 14 species detected by [Dr. Smallwood's associate] on 14 May 2023, Rincon's reconnaissance survey detected only 38% of the 60 wildlife species that have been documented on site by surveys completed by professional biologists…"[32] The DEIR should be revised to report the total number of species detected on the Project site in order to provide a complete and accurate description of the existing environmental setting.

O6-7
Continued

Second, the focused detection surveys for burrowing owl and California gnatcatcher performed by the City's consultant fail to comply with minimum standards of the available survey protocols for these species. For example, the California gnatcatcher survey did not include any non-breeding season surveys as required by U.S. Fish and Wildlife Service ("USFWS") protocols.[33] The burrowing owl surveys failed to meet nearly half of the applicable California Department of Fish and Wildlife ("CDFW") survey and reporting protocols, which leads Dr. Smallwood to conclude that the burrowing owl surveys are unreliable and cannot support a determination that burrowing owl is absent from the Project site.[34] Burrowing owl surveys that do not follow official protocols do not demonstrate compliance with CEQA.[35] Accordingly, the DEIR's findings that "since burrowing owls and coastal California gnatcatchers were not detected at the Project Site or the areas immediately surrounding the Project Site during the focused species surveys,

O6-8

[29] Smallwood Comments, pg. 14.
[30] *Id.*
[31] *Id.*
[32] *Id.*
[33] Smallwood Comments, pgs. 16-17.
[34] *Id.*, pgs. 15-20.
[35] *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899, 945-946 (burrowing owl surveys which follow CDFW "officially approved" protocol are considered adequate under CEQA).

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no impacts to these species would occur as a result of Project implementation"[36] is not supported by substantial evidence. O6-8 Continued

Finally, the DEIR's "desktop review" is incomplete and flawed. According to Dr. Smallwood, an important part of documenting a site's environmental setting includes literature and database review and consulting with local experts in order to inform and augment reconnaissance surveys and to help determine which protocol-level detection surveys should be conducted.[37] Here, Dr. Smallwood explains that the DEIR's desktop review is incomplete as it neglected readily available species occurrence databases and provides no evidence that any local experts were consulted for knowledge of occurrences of special status species in the Project area.[38] He also explains that the DEIR and the City's biological consultants misused the one database they did consult for this Project, the California Natural Diversity Database ("CNDDB"). The DEIR used the CNDDB to improperly screen out consideration of many special status species, a use for which it is not designed.[39] O6-9

Based on Dr. Smallwood's own database reviews and the various reported Project site visits, he concludes that 122 special status wildlife species occur near enough to the site to warrant analysis of their occurrence potential.[40] The DEIR addresses only 37 of these species, and uses flawed rationales in making occurrence likelihood determinations as to many species.[41] Dr. Smallwood's comments provide substantial evidence that the wildlife community at the Project site is richer than characterized by the DEIR, and more special status species occupy the site than disclosed by the DEIR.

The DEIR must be revised to provide accurate baseline information about the Project site's environmental setting with respect to biological resources to allow for an accurate impact analysis and mitigation plan for the Project. O6-10

V. THE DEIR FAILS TO ADEQUATELY ANALYZE, QUANTIFY AND MITIGATE THE PROJECT'S POTENTIALLY SIGNIFICANT IMPACTS TO AIR QUALITY AND HUMAN HEALTH O6-11

An EIR must fully disclose all potentially significant impacts of a Project, and implement all feasible mitigation to reduce those impacts to less than significant

[36] DEIR, pg. 4.3-18.
[37] Smallwood Comments, pg. 16.
[38] *Id.*
[39] *Id.*
[40] *Id.*, pg. 21.
[41] *Id.*, pgs. 21, 27-30.

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levels. The lead agency's significance determination with regard to each impact must be supported by accurate scientific and factual data.[42] An agency cannot conclude that an impact is less than significant unless it produces rigorous analysis and concrete substantial evidence justifying the finding.[43]

Moreover, the failure to provide information required by CEQA is a failure to proceed in the manner required by CEQA.[44] Challenges to an agency's failure to proceed in the manner required by CEQA, such as the failure to address a subject required to be covered in an EIR or to disclose information about a project's environmental effects or alternatives, are subject to a less deferential standard than challenges to an agency's factual conclusions.[45] In reviewing challenges to an agency's approval of an EIR based on a lack of substantial evidence, the court will 'determine de novo whether the agency has employed the correct procedures, scrupulously enforcing all legislatively mandated CEQA requirements.'[46]

O6-11
Continued

Even when the substantial evidence standard is applicable to agency decisions to certify an EIR and approve a project, reviewing courts will not 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference.'"[47]

A. The DEIR Fails to Adequately Disclose and Mitigate the Project's Significant Air Quality Impacts.

Under CEQA, a project has significant impacts if it "[v]iolate[s] any air quality standard or contribute[s] substantially to an existing or projected air quality violation."[48] The South Coast Air Quality Management District ("SCAQMD" or "Air District") maintains thresholds of significance for criteria air pollutants that are to be used in determining the significance of a project's air quality impacts under CEQA.[49] The DEIR failed to fully analyze the Project's construction emissions by improperly applying mitigation measures to unmitigated emissions prior to making its significance determination. As a result, the DEIR fails to disclose that Project

O6-12

[42] 14 CCR § 15064(b).
[43] *Kings Cty. Farm Bur. v. Hanford* (1990) 221 Cal.App.3d 692, 732.
[44] *Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236.
[45] *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.
[46] *Id., Madera Oversight Coal., Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102.
[47] *Berkeley Jets*, 91 Cal.App.4th at 1355.
[48] CEQA Appendix G.
[49] See SCAQMD Thresholds, available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

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construction may result in significant emissions that exceed applicable Air District thresholds, resulting in significant, unmitigated air quality impacts.

1. The DEIR's Air Quality Impact Analysis Improperly Relies on Mitigated Emissions to Conclude that Construction Emissions Are Less Than Significant

The DEIR underestimates the significance of the Project's air quality impacts by using mitigated emissions for its initial significance determination. By applying emissions controls that will be applied as mitigation to the Project's unmitigated emissions, the DEIR "compress[es] the analysis of impacts and mitigation measures into a single issue,"[50] in violation of CEQA. This approach is prohibited by CEQA because it fails to inform the public of the true severity of an impact.

The DEIR relies on Project Design Features ("PDFs") that are intended to reduce construction emissions to support its conclusion that the emissions are less than significant. This approach incorrectly dismisses the significance of the Project's actual, unmitigated emissions. With regard to construction emissions, the DEIR improperly relies on PDF AQ-1 and PDF-AQ-2, which "propose" that the Project will use off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 3 off-road emissions standards with Level 3 diesel particulate filters or be alternatively (non-diesel) fueled to reduce diesel exhaust emissions during Project construction.[51]

O6-12
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Critically, neither the DEIR nor the Air Quality technical report[52] it relies on, calculate or disclose the Project's unmitigated construction emissions (i.e., construction emissions before applying the PDFs.) The AQ/GHG Study makes clear that its modeled emissions for the Project only include estimated emissions with the PDFs applied, rather than first estimating unmitigated emissions without the PDFs applied.

> "Construction emissions were modeled in CalEEMod to start in April 2023 based on applicant provided information with completion anticipated in September 2025. Construction emissions associated with development of the proposed project were quantified by estimating the types and quantity of equipment that would be used on site during each of the construction phases, as provided by the model defaults. As a project design feature, off-road diesel-powered construction

[50] *Ibid.*
[51] DEIR, p. 4.2-18.
[52] DEIR, Appendix C Air Quality and Greenhouse Gas Emissions Study ("AQ/GHG Study").

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> equipment would meet or exceed the CARB and USEPA Tier 3 off-road emissions standards and be equipped with Level 3 diesel particulate filters at a minimum. Equipment may also be alternatively (non-diesel) fueled to reduce diesel exhaust emissions. Pursuant with applicant provided information, the CalEEMod equipment, greater than 50 horsepower, was changed to be equipped with CARB and USEPA rated Tier 3 engines with Level 3 diesel particulate filters."[53]

Without disclosing the Project's unmitigated construction emissions, the DEIR only discloses estimated emissions with the application of PDF-AQ-1 and PDF-AQ-2. This "downward adjustment" of the Project's construction emissions artificially reduces their significance. The DEIR concludes that the Project's construction emissions (mitigated by PDF-AQ-1 and PDF-AQ-2) are less than significant, without application of any binding mitigation measures.[54]

This approach violates CEQA. CEQA requires that an EIR disclose the significance of an impact prior to mitigation.[55] The purpose of this analysis is both to require public disclosure of a project's impacts, and to require the lead agency to "identify and focus on the significant environmental effects of the proposed project."[56] In evaluating the significance of an impact, an EIR must discuss the physical changes in the environment that the project will cause, including:

O6-12
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> relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services.[57]

Only after this discussion occurs may the agency identify and apply mitigation measures to reduce potentially significant impacts to less than significant levels.[58] The discussion is rendered meaningless (or, as here, omitted entirely) if the EIR falsely concludes that a project's impact is less than significant based on premature application of mitigation measures. In this case, the DEIR failed to undertake the requisite analysis required by CEQA Guidelines Section

[53] DEIR Appendix C, AQ/GHG Report, pgs. 26-27.
[54] DEIR, 4.2-19—21.
[55] 14 CCR § 15126.2.
[56] 14 CCR § 15126.2(a).
[57] 14 CCR § 15126.2(a).
[58] 14 CCR § 15126.4.

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15126.2 for the Project's construction emissions because the DEIR did not disclose the Project's air quality impacts prior to incorporating PDF AQ-1 and PDF-AQ-2.

Moreover, none of these PDFs are incorporated into the DEIR as a binding mitigation measure, in further violation of CEQA. CEQA defines mitigation as including any measures designed to avoid, minimize, rectify, reduce, or compensate for a significant impact.[59] The PDFs described in the DEIR are actually mitigation measures because they perform these functions. For example, PDF AQ-1's requirement to use Tier 3 construction equipment is clearly designed as mitigation to reduce the Project's construction emissions that would result from using equipment with less efficient emissions controls. These PDFs are not designed to simply modify a physical element of the Project, as is inherent in a true project "design feature." Both PDFs are designed to reduce impacts. This makes them mitigation measures within the meaning of CEQA.

CEQA requires that mitigation measures be fully enforceable through permit conditions, agreements or other legally binding instruments.[60] Because the City has not characterized PDF AQ-1 or PDF AQ-2 as mitigation measures, they are not binding on the Applicant, and will not be included in the Project's Mitigation Monitoring and Reporting Program ("MMRP").[61] Reliance on "proposed" nonmandatory and unenforceable PDFs to reduce impacts therefore provides no assurance that the Applicant would later comply with the "design features." The PDFs therefore fail to provide the binding mechanism required by CEQA to compel the Applicant's compliance with mitigation following Project approval.

O6-12
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The Court of Appeal recently reiterated that mitigation must be incorporated directly into a project's MMRP to be considered enforceable. In *Lotus v. Department of Transportation*,[62] an EIR approved by Caltrans contained several measures "[t]o help minimize potential stress on the redwood trees" during construction of a highway. Although those measures were clearly separate mitigation, the project proponents considered them "part of the project." The EIR concluded that due to the planned implementation of those measures, the project would not result in significant impacts. The Court disagreed, finding that the EIR had "disregard[ed] the requirements of CEQA" by "compressing the analysis of impacts and mitigation measures into a single issue." The Court continued, stating "[a]bsent a determination regarding the significance of the impacts … it is

[59] 14 CCR § 15370.
[60] 14 CCR §15126.4(a)(2).
[61] DEIR, Table ES-1 at pgs. ES-6—ES-26.
[62] *Lotus v. Dep't of Transp.* (2014) 223 Cal. App. 4th 645, 651-52.

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impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered."[63]

Similar to the inadequate analysis contained in the *Lotus* EIR, the DEIR asserts that incorporation of PDFs AQ-1 and AQ-2 would reduce the Project's air quality emissions to less than significant levels prior to mitigation. This approach improperly "compress[es] the analysis of impacts and mitigation measures into a single issue." Even if the DEIR's conclusions were accurate, which is unclear, the PDFs must be incorporated into the Project's MMRP as formal mitigation measures in order to be factored into the City's ultimate significance findings. "Simply stating that there will be no significant impacts because the project incorporates 'special construction techniques' is not adequate or permissible."[64]

O6-12 Continued

The City has a duty to disclose unmitigated emissions and compare them to the applicable significance thresholds before applying mitigation measures. As a result of its improper reliance on PDFs to achieve emissions reductions, the DEIR underestimates the amount of emissions that will be generated by the Project and their effects on nearby sensitive receptors. The DEIR must be revised and recirculated to include an accurate analysis of the Project's air quality impacts, and to require that any and all mitigation measures that are intended to reduce emissions are incorporated as binding mitigation in the Project's MMRP.

2. The DEIR Fails to Analyze and Mitigate the Project's Potentially Significant Health Impacts From Emissions

The DEIR's air quality analysis includes the conclusions that Project construction and operation will not expose nearby sensitive receptors to substantial pollutant concentrations, finding that such impacts will be less than significant without mitigation.[65] However, these conclusions are not supported by any analysis of the potential health risks of the Project's emissions to nearby residential receptors. The City's significance determination is not supported by accurate scientific and factual data, as required by CEQA.[66] An agency cannot conclude that an impact is less than significant unless it produces rigorous analysis and concrete substantial evidence justifying the finding.[67]

O6-13

[63] *Id.*
[64] *Id.*
[65] DEIR, pg. 4.2-21—24.
[66] 14 C.C.R. § 15064(b).
[67] *Kings County Farm Bureau*, 221 Cal.App.3d at 732.

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These standards apply to an agency's analysis of public health impacts of a project under CEQA. In *Sierra Club v. County of Fresno*, the California Supreme Court affirmed CEQA's mandate to protect public health and safety by holding that an EIR fails as an informational document when it fails to disclose the public health impacts from air pollutants that would be generated by a development project.[68] In *Sierra Club*, the Supreme Court held that the EIR for the Friant Ranch Project—a 942-acre master-planned, mixed-use development with 2,500 senior residential units, 250,000 square feet of commercial space, and open space on former agricultural land in north central Fresno County—was deficient as a matter of law in its informational discussion of air quality impacts as they relate to adverse human health effects.[69]

As the *Sierra Club* Court explained, "a sufficient discussion of significant impacts requires not merely a determination of whether an impact is significant, but some effort to explain the nature and magnitude of the impact."[70] The Court concluded that the County's EIR was inadequate for failing to disclose the nature and extent of public health impacts caused by the project's air pollution. As the Court explained, the EIR failed to comply with CEQA because after reading the EIR, "the public would have no idea of the health consequences that result when more pollutants are added to a nonattainment basin."[71] CEQA mandates discussion, supported by substantial evidence, of the nature and magnitude of impacts of air pollution on public health.[72]

O6-13
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Furthermore, in *Berkeley Jets*, the Court of Appeal held that a CEQA document must analyze the impacts from human exposure to toxic substances.[73] In that case, the Port of Oakland approved a development plan for the Oakland International Airport.[74] The EIR admitted that the Project would result in an increase in the release of toxic air contaminants ("TACs") and adopted mitigation measures to reduce TAC emissions, but failed to quantify the severity of the

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[68] *Sierra Club,* 6 Cal.5th at 518–522.
[69] *Id.* at 507–508, 518–522.
[70] *Id.* at 519, citing *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 514–515.
[71] *Id.* at 518. CEQA's statutory scheme and legislative intent also include an express mandate that agencies analyze human health impacts and determine whether the "***environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly***." (Public Resources Code § 21083(b)(3) (emphasis added).) Moreover, CEQA directs agencies to "take immediate steps to identify any critical thresholds for the ***health and safety of the people*** of the state and take all coordinated actions necessary to prevent such thresholds being reached." (Public Resources Code § 21000(d) (emphasis added).)
[72] *Sierra Club*, 6 Cal.5th at 518–522.
[73] *Berkeley Jets*, 91 Cal.App.4th at 1369–1371.
[74] *Id.* at 1349–1350.

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Project's impacts on human health.[75] The Court held that mitigation alone was insufficient, and that the Port had a duty to analyze the health risks associated with exposure to TACs.[76] As the CEQA Guidelines explain, "[t]he EIR serves not only to protect the environment but also to demonstrate to the public that it is being protected."[77]

Here, the DEIR suggests that the City need not perform a health risk analysis based on its application of the South Coast Air Quality Management District's ("SCAQMD") localized significance thresholds ("LSTs") to analyze localized air quality impacts to sensitive receptors.[78] With respect to diesel particulate matter ("DPM"), which is a TAC, the DEIR finds that localized DPM emissions from Project construction are below the LST screening levels for $PM_{2.5}$.[79] The DEIR cites this finding in support of its conclusion that Project construction would not expose sensitive receptors to substantial TAC concentrations: "[a]lthough the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts."[80] The DEIR similarly uses LST screening levels to support the conclusion that Project operations would not expose sensitive receptors to substantial pollutant concentrations, leading to a finding that impacts would be less than significant.[81]

O6-13
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The City's reliance on LSTs is misplaced, as the purpose of LSTs is not to provide health risk significance thresholds for TACs such as DPM, and therefore are not a proper metric to assess cancer risk from DPM exposure. Rather, LSTs by definition apply to criteria pollutants only and represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area.[82]

DPM is not a criteria pollutant for which there is an applicable federal or state ambient air quality standard. The seven criteria air pollutants are: ozone (03); carbon monoxide (CO); nitrogen dioxide (NO2); sulfur dioxide (SO2); PM10; PM2.5; and lead (Pb). Conversely, DPM is made of dozens of constituent particles that

[75] *Id.* at 1364–1371.
[76] *Id.*
[77] 14 C.C.R. § 15003(b).
[78] DEIR, pg. 4.2-13.
[79] *Id.*, pg. 4.2-22.
[80] *Id.*
[81] 4.2-23.
[82] http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.

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cause cancer. For example, the California Air Resources Board explains that DPM is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances.[83] Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and oxides of nitrogen (NOx). LSTs do not quantify the toxic components of DPM or other TACs, nor do they compare them to SCAQMD's specific cancer risk threshold of 10 in one million. In sum, LSTs were not designed to assess the unique health risks of toxic air contaminants like DPM.

O6-13 Continued

Dr. Clark used the CalEEMod analysis outputs for the Project's operation phase to assess the cancer risk to nearby sensitive receptors from the Project's DPM emissions from Project's generators.[84] His analysis calculates the cancer risk at one of the several nearby residences to be approximately 20 in one million[85], greatly exceeding the 10 in one million significance threshold set by SCAQMD, resulting in a significant impact under CEQA.[86] The EIR's attempt to avoid performing an HRA for the Project based on LSTs is especially egregious in light of Dr. Clark's findings, which provide substantial evidence that the Project is likely to have significant health impacts. A revised EIR is required to fully disclose, analyze and mitigate these significant impacts.

Because the DEIR lacks any analysis disclosing health risks from exposure to DPM, it fails to meet CEQA's informational standards and the City's significance finding is not supported by substantial evidence. The City must prepare a revised EIR which includes an analysis of the Project's construction and operation health risks.

VI. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE AND MITIGATE SIGNIFICANT NOISE IMPACTS

O6-14

The DEIR's analysis of noise impacts is deficient in a number of ways and as a result, fails to disclose or mitigate significant impacts. Instead of applying the City's Noise Ordinance, the DEIR uses an improper significance threshold to assess the Project's construction noise impacts. The operational noise impact assessment is not supported by substantial evidence as the DEIR fails to disclose reference levels used in modeling noise levels. And the DEIR fails to analyze Project

[83] Clark Comments, pg. 5.
[84] Clark Comments, pgs. 6-9.
[85] *Id.*, pg. 9.
[86] *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (EIR must disclose an impact as significant when it exceeds a duly adopted CEQA significance threshold).

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construction and operational noise using an ambient-based threshold, in violation of CEQA.

A. Substantial Evidence Shows that the Project's Construction Noise Impacts Will be Significant and Unmitigated

The DEIR concludes that "because noise levels resulting from construction activities would be temporary and would comply with provisions in the City's Noise Ordinance, construction noise impacts resulting from the construction of the Project and off-site improvements would be less than significant."[87] This conclusion is faulty for several reasons.

As an initial matter, the fact that construction noise levels may be "temporary" does not support the conclusion that impacts would be less than significant. As the DEIR recognizes, the CEQA Guidelines state that a project's impacts are significant if it would "result in generation of a substantial *temporary* or permanent increase in ambient noise levels in the vicinity of project in excess of standards established in the local general plan or noise ordinance…[emphasis added]"[88] A substantial temporary increase in ambient noise is unquestionably a significant impact.

O6-14
Continued

Next, while the DEIR asserts that Project construction noise would "comply with provisions in the City's Noise Ordinance," that is demonstrably not the case. The Santa Clarita Municipal Code limits daytime noise in residential zones to 65 dB.[89] The DEIR states that over the course of a typical construction day, construction equipment would operate as close as 105 feet from adjacent sensitive noise receptors (residents) and that it is assumed that on average, construction equipment would operate at an average of 200 feet from such receptors.[90] The DEIR calculates that Project construction would generate a noise level of 70 dBA at a distance of 200 feet. This plainly does not comply with the 65 dBA daytime noise limit for residential receptors set forth in the City's Noise Ordinance.

In order to find no significant impact, the DEIR compares the Project's predicted 70 dBA construction noise to a different standard. It states that "[b]ased upon FTA Transit Noise and Vibration Impact Assessment criteria and because the adjacent properties are zoned residential, construction noise would be significant if noise levels exceed 80 dBA L_{eq} for an 8-hour period or construction is conducted

[87] DEIR, pg. 4.11-15.
[88] *Id.,* pg. 4.11-11; *see also*, CEQA Guidelines Appendix G.
[89] Santa Clarita Municipal Code section 11.44.040.
[90] DEIR, pg. 4.11-15.

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outside the allowable hours for construction as stated in SCMC Section 11.44.080."[91] The DEIR fails to explain or justify why it applies the 80 dBA FTA standard rather than the 65 dBA limit in the City's Noise Ordinance. The DEIR further suggests that, so long as construction is only done within the hours permitted in section 11.44.080, the noise limits set forth in section 11.44.040 do not apply. Again, there is no discussion or justification given for this approach, and this interpretation is inconsistent with the plain language of the City's Noise Ordinance. Section 11.44.080 provides that "No person shall engage in any construction work which requires a building permit from the City on sites within three hundred (300) feet of a residentially zoned property except" during the specified hours—it does not exempt construction noise from the limits enumerated in section 11.44.040.

Finally, while the DEIR recognizes that under CEQA, noise impacts are significant if they represent a substantial increase above ambient levels, the DEIR completely omits any discussion of noise increases over ambient levels. As the DEIR recognizes, "a 5-dB change is generally recognized as a clearly discernible difference."[92] A 10 dB increase is judged by most people as a doubling of the sound level.[93] Measured ambient L_{eq} levels were 47-49 dBA at the residences closest residences to the east of the Project site, and even lower, 42-43 dBA at the residences to the north.[94] The DEIR's predicted construction noise levels of 70 dBA are more than 20 DB above ambient levels at those residential receptors and represent significant unmitigated impacts.

O6-14
Continued

The DEIR's failure to include any discussion, let alone analysis, of the increase in noise over ambient levels is a blatant violation of CEQA. CEQA requires agencies to conduct noise analyses for projects that consider both the absolute noise levels expected, and the degree noise levels are expected to increase. Noise studies that rely on a single measure that excludes possible significant impacts from noise increases or noise extremes do not receive deference by reviewing courts.

In *King & Gardiner Farms, LLC v. County of Kern*, the Court of Appeal held that an agency cannot simply rely on compliance with local noise regulations to conclude there will be no significant noise impacts without considering the impacts of increases in noise.[95] The County approved an EIR for proposed zoning

[91] *Id.*, pgs. 4.11-15—16.
[92] *Id.,* pg. 4.11-14.
[93] Toncheva Comments, pg. 3.
[94] DEIR, Figure 4.11-2.
[95] *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 894.

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amendments to streamline oil and gas permitting.[96] The EIR included an analysis of noise impacts that determined significance based solely on whether the 65 decibel day-night average ("dBA DNL") threshold in the County General Plan would be exceeded.[97] The Court of Appeal reasoned that the County General Plan did not conclude that all increases in the magnitude of noise are insignificant until the 65 dBA DNL threshold is exceeded, so the General Plan "does not constitute substantial evidence that the magnitude of an increase in ambient noise is irrelevant."[98] Rather, an EIR's noise analysis should consider both the increase in noise level and the absolute noise level associated with a project in determining the significance of the project's noise impacts.[99] The Court of Appeal concluded that an agency cannot exclusively rely on "a single cumulative DNL metric for determining the significance of the project's noise impacts" while deciding "the magnitude of the increase in ambient noise is irrelevant."[100]

O6-14
Continued

In *Berkeley Jets*, the Court of Appeal invalidated the Port of Oakland's EIR for expansion of the Oakland Airport because of its reliance on an improper noise standard.[101] The EIR evaluated the significance of noise impacts based on whether the estimated level of sound would exceed 65 dB Community Noise Equivalent Level ("CNEL").[102] However, as the Court of Appeal explained, the CNEL metric—which averages noise over the course of a day—could not be the sole indicator of significant effects from noise because it does not provide a meaningful analysis of the "degree single overflights will create noise levels over and above the existing ambient noise level at a given location, and the community reaction to aircraft noise, including sleep disturbance."[103] Therefore, the Court concluded, a revised EIR with additional study of noise impacts from flights was necessary.[104]

The City must revise the DEIR to address compliance with the noise limits set forth in its noise ordinance and to include an evaluation of the impact of increased noise levels attributable to Project construction and operations.

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[96] *Id.* at 829.
[97] *Id.* at 830, 889.
[98] *Id.* at 894.
[99] *Id.*
[100] *Id.*
[101] *Berkeley Jets*, 91 Cal.App.4th at 1381–1382.
[102] *Id.* at 1373.
[103] *Id.* at 1381–1382.
[104] *Id.* at 1382.

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B. The DEIR's Operational Noise Analysis Is Not Supported by Substantial Evidence and Does Not Comply With CEQA

As with the DEIR's construction noise analysis, the City has failed to analyze the Project's operational noise impacts using an ambient-based threshold and therefore violates CEQA. In addition, the DEIR lacks substantial evidence supporting its conclusion that the Project's operational noise impacts will be less than significant. As Ms. Toncheva explains, the DEIR's operational noise predictions were generated by SoundPLAN software, using its source database for parking lot, exhaust and HVAC sources.[105] The DEIR shows noise contours for operational noise from HVAC and exhaust point sources and parking lot area sources, and sets forth predicted operational noise levels at the sensitive receptors adjacent to the Project site.[106] However, the DEIR does not include the SoundPLAN reference levels used nor does it provide a detailed narrative of operational activities on the Project site, including schedule, making it impossible to fully evaluate the DEIR's operational noise analysis.[107] O6-15

For example, the DEIR shows a concrete wall around the perimeter of the Project site. Ms. Toncheva notes that while a solid barrier could provide 10-15 dB reduction in operational noise levels, the architectural renderings appear to show that the wall is not solid, which would dramatically reduce its effectiveness to a 5 dBA reduction.[108] "Based on the contours shown in Figure 4.11-3 and the receptor noise levels shown in Table 4.11-3**,** it appears the SoundPLAN model could be overestimating attenuation from the perimeter wall."[109]

Similarly, the DEIR shows a 45 dBA contour line around the sound stage building from rooftop mechanical equipment.[110] Ms. Toncheva reviewed the Noise Technical Report, which includes cut sheets for equipment planned for the Project site, including sound power levels of 77 dBA at 10 feet from the HVAC units.[111] Ms. Toncheva opines that it doesn't appear that these reference levels were used in the SoundPLAN model, and that it is unclear whether mechanical noise from the project would comply with the City's Noise Ordinance at nearby residences due to the lack of documentation of the SoundPLAN model.[112]

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[105] Toncheva Comments, pg. 5.
[106] DEIR, pg. 4.11-16—17.
[107] Toncheva Comments, pg. 5.
[108] *Id.*
[109] *Id.*
[110] DEIR, Figure 11-3.
[111] Toncheva Comments, pg. 5.
[112] *Id.*

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It is well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[113] The DEIR's conclusions regarding the Project's operational noise impacts are therefore not supported by substantial evidence, requiring that the DEIR be revised and recirculated. O6-15 Continued

VII. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE AND MITIGATE IMPACTS TO BIOLOGICAL RESOURCES

Dr. Smallwood's comments explain in detail how the DEIR fails to adequately analyze several of the Project's potentially significant impacts on wildlife. The DEIR does not assess the Project's impacts on habitat loss and fragmentation, fails to adequately address impacts on wildlife movement, and lacks any discussion of the Project's threats to wildlife due to road mortality and window strikes. In addition, the DEIR's cumulative impacts analysis with respect to biological resources is wholly inadequate under CEQA. Finally, Dr. Smallwood explains how the DEIR lacks substantial evidence that the biological resource mitigation measures will reduce impacts to less than significant levels, and proposes additional feasible mitigation measures that the City must evaluate in a revised EIR. O6-16

A. The DEIR Fails to Analyze Potentially Significant Impacts to Wildlife

The DEIR purports to analyze whether the Project would have a substantial adverse effect, either directly or through habitat modifications, on any special status species.[114] As discussed above, the DEIR is deficient in its identification of special status wildlife species. Nevertheless, it recognizes that 47 special status wildlife species have been identified within a 5-mile radius of the Project site, seven have a moderate to high potential to occur on the site, and three have been observed on the site by the City's consultants.[115] The DEIR admits that potentially suitable habitat for these species exists on the Project site and that implementation of the Project would potentially impact existing habitat, which would cause potentially significant impacts.[116] Despite identifying potentially significant impacts, the DEIR omits any analysis of such impacts on wildlife habitat such as habitat loss and fragmentation.

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[113] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
[114] DEIR, pg. 4.3-17.
[115] *Id.*, pg. 4.3-18.
[116] *Id.*

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Dr. Smallwood explains that the Project area has undergone severe habitat fragmentation, a process that poses significant threats to wildlife.[117] The Project would contribute further to habitat fragmentation by the loss of one of the region's last patches of undeveloped open space.[118] "Habitat loss not only results in the immediate numerical decline of wildlife, but it also results in permanent loss of productive capacity."[119] Dr. Smallwood expains the methods for estimating the loss of productive capacity that would be lost by development of the Project, and using published studies that measured bird nesting densities elsewhere he predicts the loss of 1,924 bird nests as a result of the Project's development.[120] In addition to the loss of nest sites, the reproductive capacity of the site would be greatly diminished because development will remove nest subtrate and foraging ground as the Site is graded and covered in impervious surfaces.[121] The DEIR lacks any analysis of, let alone mitigation for, these potentially significant impacts. The DEIR must be revised to analyze the Project's impacts to wildlife caused by habitat loss and fragmentation.

O6-16
Continued

The DEIR also purports to analyze whether the Project would interfere substantially with the movement of any wildlife species or with established wildlife corridors.[122] However, the DEIR only addresses the second part of the threshold (interference with wildlife corridors) and ignores the first part (interference with movement of wildlife species). The DEIR's narrow focus on "established wildlife corridors" ignores interference with wildlife movement generally. As Dr. Smallwood explains, "[a] site such as the proposed project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant [i.e., flying] wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol."[123] The Project would cut off such wildlife from one of the last remaining stopover and staging opportunities in the Project area, forcing ever increasing travel between remaining stopover sites.[124] This represents an unexamined and unmitigated potentially significant impact that must be addressed in a revised EIR.

O6-17

Dr. Smallwood identifies two additional potentially significant impacts to wildlife that are completely ignored by the DEIR.

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[117] Smallwood Comments, pg. 30.
[118] *Id.*
[119] *Id.*
[120] *Id.*
[121] *Id.*
[122] DEIR, pg. 4.3-23.
[123] Smallwood Comments, pg. 31.
[124] *Id.*

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First, the DEIR fails to consider the Project's impacts to animals crossing roads with significantly increased Project-generated traffic. Dr. Smallwood uses recent studies of traffic-caused wildlife mortality and the Project's vehicle miles traveled ("VMT") estimates to predict thousands of wildlife fatalities attributable to the Project each year.[125] These impacts are unexamined in the DEIR.

Second, Dr. Smallwood explains the known significant impacts on bird mortality from window collisions and the potentially significant impacts posed by the Project's office building which will include significant glass windows.[126] He reviews numerous studies of bird fatalities from collisions with windows, and predicts 120 annual bird deaths from window collisions on the Project site.[127] Like road mortality, these impacts are not discussed in the DEIR.

O6-17
Continued

Dr. Smallwood's comments are substantial evidence that the Project may cause significant unanalyzed and unmitigated impacts with respect to habitat fragmentation, wildlife movement, and wildlife mortality from road impacts and window collisions, and these impacts must be fully analyzed and mitigated in a revised DEIR.

B. The DEIR Fails to Analyze the Project's Cumulative Impacts to Wildlife

The DEIR lacks an adequate analysis of the Project's cumulative impacts on wildlife. As an initial matter, the DEIR incorrectly states the law with respect to CEQA's requirement that a project's cumulative impacts be analyzed. "Due to the site-specific nature of biological conditions…impacts to biological resources are typically assessed on a project-by-project basis rather than on a cumulative basis."[128] This is flatly contradicted by one of CEQA's mandatory requirements: "An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in [CEQA Guidelines] section 15065(a)(3)."[129] Section 15065(a)(3) requires that an EIR examine whether a project "has possible environmental effects that are individually limited but cumulatively considerable."[130] The DEIR's suggestion that impacts to biological resources need only be assessed on a project-by-project and not cumulatively is contradicted by CEQA's plain language.

O6-18

[125] *Id.*, pgs. 34-35.
[126] *Id.*, pgs. 35-38.
[127] *Id.*
[128] DEIR, pg. 4.3-25.
[129] 14 CCR § 15130(a).
[130] 14 CCR § 15065(a)(3).

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The DEIR does recognize that there are 36 related projects in the Project vicinity, that those projects "would result in the cumulative increase of urbanization and development in the region that would cause the loss of native vegetation, tree removal and reduction of open space," and that as a result, there would be less habitat available for protected species.[131] Rather than analyzing and mitigating these impacts, however, the DEIR goes on to state that, "as with the Project, related projects and other future development projects would be subject to established regulations pertaining to the protection of biological resources…."[132] The DEIR concludes that "[w]ith adherence to applicable regulations and any site-specific recommendations set forth in a site-specific biological resources assessment, the Project and related projects would not result in significant cumulative impacts related to biological resources."[133]

O6-18 Continued

The DEIR's conclusory statement that the Project would not result in significant cumulative impacts to biological resources is not supported by substantial evidence and ignores CEQA's mandates with respect to cumulative impacts analysis. Pursuant to CEQA Guidelines section 15064(h)(3), "[w]hen relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable."[134] The DEIR provides no explanation of how the Project's compliance with regulations would ensure that the Project's contributions to cumulative impacts to biological resources would not be cumulatively considerable. The DEIR must be revised to include a proper analysis of the Project's potentially significant cumulative impacts to biological resources.

C. The DEIR's Mitigation Measures Are Inadequate to Address the Project's Significant Impacts to Biological Resources

Dr. Smallwood's comments explain why the DEIR biological resources mitigation measures will not reduce the Project's impacts to a level of insignificance.[135] In particular, he points out the following:

O6-19

- MM-BIO-1 requires that the Project implement a number of "best management practices during construction" that purport to reduce

[131] DEIR, pg. 4.3-25.
[132] *Id.*
[133] *Id.*
[134] 14 CCR § 15064(h)(3).
[135] Smallwood Comments, pgs. 39-42.

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impacts to special status species during construction.[136] These include limiting speed limits of construction vehicles, fencing or sloping of open trenches to prevent wildlife entrapment and removing food-related trash items from the Project site daily. As Dr. Smallwood points out, none of these "best management practices" would do anything to prevent further habitat fragmentation, reduce impacts to wildlife caused by Project-generated traffic or window collisions, or lessen the Project's interference with wildlife movement in the region.[137]

- MM-BIO-2 requires the presence of a qualified biological monitor be present on the Project site during initial ground disturbance or vegetation removal activities, with authority to temporarily stop work if any special status species are observed.[138] While Dr. Smallwood concurs that presence of a biological monitor onsite during Project construction is warranted, he states that this measure does nothing to address the Project's destruction of habitat and productive capacities of special status species, would not prevent further habitat fragmentation or reduce impacts of traffic and window collisions, nor would it mitigate the Project's interference with wildlife movement in the region.[139]
- MM-BIO-3 states that construction activities should occur outside of the bird breeding season to the extent practicable, and that construction activities within the breeding season be preceded by a nesting bird survey no more than 3 days prior to initiation of ground disturbance or vegetation removal.[140] Dr. Smallwood points out that this measure incorrectly states the duration of the bird breeding season recognized by California Department of Fish and Wildlife, and the DEIR should be revised accordingly.[141] He further points out that while pre-construction surveys for nesting birds are essential, they should be preceded by detection surveys to inform the preconstruction surveys of nesting locations.[142] Finally, Dr. Smallwood opines that MM-BIO-3 does nothing to mitigate the Project's destruction of habitat and productive capacity of birds that breed on site or to diminish the Project's impacts on habitat fragmentation.[143]

O6-19
Continued

[136] DEIR, pg. 4.3-18.
[137] Smallwood Comments, pg. 39.
[138] DEIR, pg. 4.3-19.
[139] Smallwood Comments, pgs. 39-40.
[140] DEIR, pg. 4.3-19.
[141] Smallwood Comments, pg. 40.
[142] *Id.*
[143] *Id.*, pg. 41.

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Finally, Dr. Smallwood proposes several additional feasible mitigation measures to reduce the Project's potentially significant impacts.[144] These include measures to address wildlife mortality from road and window collisions. He also proposes that protocol-level detection surveys meeting minimum standards of available guidelines be required for multiple species, including burrowing owl and California gnatcatcher, as well as a suite of special-status species of bats.[145] Such surveys are needed to support negative findings of species where appropriate, inform pre-construction surveys to improve their efficacy, estimate Project impacts, and inform other necessary mitigation.[146] The City must evaluate and include all feasible mitigation measures, including those proposed by Dr. Smallwood, in a revised DEIR.

O6-19
Continued

VIII. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE AND MITIGATE THE PROJECT'S TRANSPORTATION IMPACTS

The DEIR's transportation impacts analysis includes an estimate of the Project's expected home-based work vehicle miles traveled ("VMT") per employee.[147] The DEIR uses a significance threshold of 15 percent below the City's baseline VMT, which is asserted to be 21.0 VMT per person using base year 2012. The DEIR states that this threshold is 15.7.[148] The City's transportation consultant used the Southern California Association of Governments ("SCAG") 2016 RTP/SCS Regional Travel Demand Model to generate the Project's estimated VMT.[149] The DEIR asserts that such modeling calculated the Project's home-based work VMT per employee of 14.0, which is less than the adopted significance threshold of 15.7, and concludes therefore that the Project's VMT impacts are less than significant and require no mitigation.[150] CREED LA's transportation expert Norman Marshall finds a number of serious flaws in the DEIR's VMT analysis, and Mr. Marshall's comments provide substantial evidence that the Project's VMT impacts in fact are significant and require mitigation.[151]

O6-20

[144] *Id.,* pg. 42-44.
[145] *Id.*, pg. 42.
[146] *Id.*
[147] DEIR, pg. 4.14-18.
[148] *Id.;* note, however, that the DEIR's Appendix L (Transportation Assessment for Shadowbox Studios) sets forth a significance threshold of 17.9, which is in fact 15% below the City's purported 21.0 VMT for base year 2012. This discrepancy is not explained, and the DEIR should be revised to clarify its significance threshold and explain this discrepancy.
[149] See Appendix C to DEIR Appendix L, VMT Modeling Summary (Iteris, August 24, 2021).
[150] DEIR, pg. 4.14-18.
[151] *See generally,* Marshall Comments.

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First, Mr. Marshall identifies a basic discrepancy in the DEIR's analysis that calls into question the VMT modeling results. The DEIR's transportation assessment (Appendix L) includes a graphic clearly showing that the Project site is in an area of the City that has greater daily home based work VMT per employee than the City baseline.[152] This graphic was derived from the same SCAG model the City purportedly used to calculate the Project's VMT impacts.[153] As the same model was used both to create the graphic included in Appendix L and to estimate the Project's VMT impacts in the DEIR, Mr. Marshall expects that the result would be the same, i.e., that the Project's VMT would exceed the City's baseline VMT.[154] Instead, the analysis performed for the DEIR finds the opposite, i.e., that the Project's VMT is well below the City's baseline VMT. Mr. Marshall points out that this discrepancy is neither explained nor justified in the DEIR.[155]

Second, Mr. Marshall questions the validity of the DEIR's VMT analysis because it was performed using an outdated and unreliable model. The SCAG 2016 Travel Demand Model was replaced in 2020 with a newer and more complex regional travel demand model with a base year of 2016.[156] In addition to being out-of-date, Mr. Marshall explains that the SCAG 2016 model differs from the 2020 version in ways that are crucial to the DEIR's VMT impact analysis. As used in the DEIR, VMT represents average commute distances to and from the Project.[157] Both the 2016 and 2020 models used the 2011 California Household Travel Survey ("CHTS") in estimating commute trip length.[158] However, the 2020 model also incorporates census data in addition to CHTS data. As Mr. Marshall explains, the updated 2020 model reported that average commute distances across the entire region are 12.5 miles using the CHTS data and 20.6 miles using more reliable Census data.[159] The Census average commute data included in the 2020 model are therefore 65% higher than the average in the CHTS data used to calibrate the outdated 2016 model. "Any commute length estimates based on the outdated model, including those reported in the DEIR, significantly underestimate work trip VMT."[160] The 2020 model was available to the City's consultants well before the DEIR analysis was performed in August 2021.[161]

O6-20
Continued

[152] Marshall Comments, pg. 3.
[153] *Id.*
[154] *Id.*
[155] *Id.*
[156] *Id.*, pg. 4.
[157] *Id.*
[158] *Id.*
[159] *Id.*
[160] *Id.*
[161] See Appendix C to DEIR Appendix L, VMT Modeling Summary (Iteris, August 24, 2021).

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Rather than relying on an outdated model based on data that underestimates commute trip lengths, Mr. Marshall opines that it is much more accurate to use actual data on commute trips taken from the census. He uses such data to estimate commute trip distances of workers in the Project area, and the result is a mean distance between work and home for Project area workers of 19.6 miles.[162] Because this is a one-way distance, he doubles that figure to represent round trip commutes, and further adjusts the figure to convert from straight line to road distances and to account for carpooling transit, walking and biking.[163] The resulting average is 38.7 VMT per worker per day, nearly triple the 14.0 VMT per day estimated by the DEIR using the outdated model.[164] (Note that this result is consistent with the DEIR graphic discussed above showing that average VMT in the Project area exceeds the City's baseline.) Mr. Marshall concludes "[t]here is no evidence that the outdated regional model with a base year of 2012 accurately represents commute trip lengths to the project area, and the model estimates are refuted by Census data. Therefore, it is irresponsible to rely on the model to claim that the project will not have significant VMT impacts."[165]

O6-20
Continued

Third, Mr. Marshall explains that the DEIR's VMT estimates are inconsistent with assumptions about Project trip lengths used in the CalEEMod modeling for the DEIR's GHG impacts analysis. As documented in DEIR Appendix C, the Project's GHG emissions were calculated using CalEEMod and are based on the number of trips times distance, i.e., VMT. The assumptions used in CalEEMod are inconsistent with those used in the transportation analysis. For example, the number of trips used in CalEEMod analysis (7,021.82)[166] is lower than the number of trips used in the transportation analysis (7,293).[167] Even more glaring, CalEEMod uses a default home-based work trip length of 16.6 miles, i.e., a roundtrip of 33.2 miles.[168] The inconsistency between the assumed Project trip length of 33.2 miles and the estimated Project VMT of 14.0 is neither explained nor justified.

For all of the foregoing reasons, the DEIR's VMT analysis is not based on substantial evidence, and the City must prepare a revised DEIR with a proper and supported VMT analysis.

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[162] Marshall Comments, pgs. 6-7.
[163] *Id.*, pg. 7.
[164] *Id.*
[165] *Id.*
[166] DEIR Appendix C, pg. 109 of 242.
[167] DEIR Appendix L, pg. 34.
[168] DEIR Appendix C, pg. 110 of 242.

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IX. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE AND MITIGATE THE PROJECT'S GHG IMPACTS

The DEIR's GHG impacts analysis is based solely on a qualitative approach that purports to assess the Project's consistency with certain "plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change and the Project's ability to incorporate sustainable features in its design to reduce GHG emissions."[169] The DEIR relies on consistency with the California Air Resources Board ("CARB") 2022 Scoping Plan, SCAG's 2020-2045 RTP/SCS and the Santa Clarita General Plan. The DEIR includes a quantitative analysis of the Project's GHG emissions "for informational purposes," but does not use this assessment in its GHG impacts analysis based on the assertion that neither the City nor "any other State or applicable regional agency [has adopted] a numerical significance threshold for assessing GHG impacts that is applicable to the Project."[170] As discussed below, the DEIR's qualitative GHG impact assessment is not supported by substantial evidence and does not comply with CEQA. O6-21

The CEQA Guidelines allow, under certain circumstances, a lead agency to rely on a qualitative analysis or performance based standards to determine the significance of a Project's GHG impacts.[171] In doing so, the lead agency should consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions.[172] "In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable."[173]

Furthermore, the CEQA Guidelines mandates that an environmental document, like the DEIR, that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to

[169] DEIR, pg. 4.7-11.
[170] *Id.*
[171] 14 CCR § 15064.4
[172] *Id.*
[173] 14 CCR § 15064.4(b)(3).

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the project.[174] The DEIR contains a cursory and incomplete analysis of the Project's compliance with the 2022 Scoping Plan, the SCAG RTP/SCS and the City's General Plan that fails to comply with CEQA's requirements.

A. The DEIR Does Not Demonstrate Compliance with the 2022 Scoping Plan

The DEIR identifies the 2022 Scoping Plan strategies applicable to the Project as including "reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation."[175] The DEIR claims compliance with these strategies largely through compliance with existing laws and regulations including the CALGreen Code and Building Energy Efficiency Standards.[176] These bare conclusions contain no analysis of "how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable."[177]

O6-21
Continued

The DEIR also claims that the Project is consistent with the 2022 Scoping Plan as it would reduce VMT and energy demand, thereby reducing GHG emissions.[178] However, as discussed herein, the DEIR's VMT and energy impacts conclusions are deficient and not supported by substantial evidence. Unless the City revises the DEIR to address the defects in those analyses, it cannot use a claimed reduction in VMT and energy demand as support for a finding that the Project will reduce GHG emissions.

Finally, the City claims compliance with the 2022 Scoping Plan by asserting that the Project will incorporate a "number of sustainable design features, including but not limited to installation of energy-efficient light fixtures, high-efficiency plumbing fixtures, EV parking spaces, and rooftop PV systems and solar panels."[179] While these design features may reduce energy consumption and GHG emissions, the DEIR contains no analysis supporting that contention. Moreover, the DEIR lacks any evidence that such features are mandatory, binding and enforceable, nor does the DEIR incorporate those features as mitigation measures applicable to the Project as required by CEQA Guidelines section 15183.5(b)(2).

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[174] 14 CCR § 15183.5(b)(2).
[175] DEIR, pg. 4.7-14.
[176] *Id.*
[177] 14 CCR § 15064.4(b)(3).
[178] DEIR, pg. 4.7-14.
[179] *Id.,* pgs. 4.7-14—15.

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B. The DEIR Does Not Demonstrate Compliance with the SCAG RTP/SCS

The DEIR sets forth a number of GHG reduction strategies contained in SCAG's 2020-2045 RTP/SCS and asserts that the Project will be consistent with those strategies. However, the DEIR's analysis omits key facts that undermine its conclusions.

Among the SCAG GHG reduction strategies cited in the DEIR is to "focus growth near destinations and mobility options."[180] This strategy includes emphasizing land use patterns that facilitate multimodal access to work, expanding job opportunities near transit, encouraging design and transportation options that reduce reliance on and number of solo car trips and identifying ways to "right size" parking requirements and promoting alternative parking strategies.[181] The DEIR claims that the Project is consistent with each of these strategies, largely by pointing out that the Project will be near two bus stops, is a half-mile away from the nearest Metrolink station and will have 170 bicycle storage spaces on-site.[182] This analysis omits mention of the impacts of the Project on City employment, and the fact that it includes more parking spaces than projected on-site employees. The Project is expected to "generate direct employment for 2,333 persons and 3,500 additional indirect employment due to studio activities."[183] The Project will include a 1,072-space parking structure, approximately 455 surface parking spaces (including 221 vehicle parking spaces, 15 delivery van spaces and 219 trailer parking spaces), with an additional 1,157-space employee parking lot on the north side of Placerita Creek, for a total of 2,684 parking spaces on the Project site.[184] As the Project will have more parking spaces than expected employees, it plainly is not designed to encourage use of public transit or to reduce single car trips as set forth in SCAG's RTP/SCS.

O6-21
Continued

Additionally, the Project's projected employment by itself exceeds the SCAG forecast for all jobs in the City. The DEIR sets forth baseline (2022) and future (2026, i.e., expected Project buildout) employment projections for the City of Santa Clarita based on forecasts contained in SCAG's 2020-2045 RTP/SCS.[185] The DEIR reports a 2022 baseline of 94,097 jobs and a 2026 forecast of 96,028 jobs for the City.[186] This is a projected increase of 1,931 *total jobs in the City*, which is eclipsed

[180] *Id.*, pg. 4.7-15.
[181] *Id.*
[182] *Id.*
[183] DEIR, pg. 4.2-18.
[184] *Id.*, pg. 2.0-20.
[185] *Id.*, pg. 4.12-1, Table 4.12-1.
[186] *Id.*

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by the 2,333 direct employees forecast for the Project alone. On the one hand, the DEIR claims the Project is consistent with SCAG's RTP/SCS and on the other hand ignores the Project's inconsistency with the job growth forecasts based on the very same plan.

C. The DEIR Does Not Demonstrate Compliance with the City's General Plan

The DEIR's analysis of consistency with the City's General Plan is entirely conclusory and lacks any of the analysis required by CEQA. The entirely of the "analysis" is set forth below:

> "The City's General Plan includes Goal CO 8, which is directed at improving energy efficiency, reducing energy and natural resource consumption, and reducing GHG emissions associated with development. The Project would be required to comply with the applicable requirements of the CALGreen Code and California Energy Code, the City's Green Building Standards Code, and the City's Energy Conservation Code. The Project would be constructed in compliance with the 2022 Title 24 (CALGreen and Energy Code) standards and would be located within walking distance to the Jan Heidt Newhall Metrolink Station. In addition, the Project would include on-site amenities (private park, picnic areas, food truck stations), bicycle parking spaces, and electrical golf carts, which would contribute to vehicle trip reductions. Therefore, the Project would be consistent with the applicable goals, objectives, and policies in the City's General Plan."[187]

O6-21
Continued

The DEIR doesn't even attempt to assess the Project's consistency with the numerous General Plan policies specifically designed to further Goal CO-8, which is to "improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases."[188] The General Plan sets forth the following objective and polices in support of that goal:

Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

- Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy

[187] DEIR, pg. 4.7-17.
[188] City of Santa Clarita General Plan, pg. CO-94.

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and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.

- Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.
- Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.
- Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.
- Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.
- Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.
- Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.
- Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.
- Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.
- Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.
- Policy CO 8.3.11: Consider allowing carbon off-sets for large development projects, if appropriate, which may include funding off-site projects or purchase of credits for other forms of mitigation,

O6-21
Continued

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provided that any such mitigation shall be measurable and enforceable.

- Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.[189]

The DEIR makes no effort to assess the Project's consistency with any of these policies. As with the DEIR's cursory analysis of consistency with the 2022 Scoping Plan, it asserts that the Project will comply with green building standards and describes a handful of unenforceable project design features to support its conclusions regarding GHG impacts. While these design features may reduce energy consumption and GHG emissions, the DEIR fails to support that contention with analysis or evidence. Moreover, the DEIR lacks any evidence that such features are mandatory, binding and enforceable, nor does the DEIR incorporate those features as mitigation measures applicable to the Project as required by CEQA Guidelines section 15183.5(b)(2). O6-21 Continued

The City must revise and recirculate the DEIR with a proper analysis of the Project's GHG impacts.

X. THE DEIR IMPROPERLY INCLUDES A NUMBER OF UNENFORCEABLE AND NONMANDATORY PROJECT DESIGN FEATURES IN ITS ANALYSIS OF GEOLOGY, ENERGY, PUBLIC SERVICE AND WILDFIRE IMPACTS

As discussed at length in section V.A.1, above, the DEIR improperly relies on "proposed" and unenforceable project design features PDF-AQ-1 and PDF-AQ-2 to mitigate the Project's impacts prior to analyzing and disclosing those impacts, in violation of CEQA. The DEIR makes the same errors in applying PDFs to its geology, energy, public services and wildfire impacts analyses. For all of the reasons discussed above, this is a clear violation of CEQA's requirement that the DEIR disclose the Project's unmitigated impacts prior to applying mitigation. O6-22

A. The DEIR's Geology Impact Analysis Improperly Relies on Project Design Features to Conclude that the Project's Geology Impacts Are Less Than Significant

The DEIR includes proposed PDF-GEO-1 through PDF-GEO-7[190], which are derived from the City's consultant's geotechnical report.[191] Because these are not

[189] *Id.,* pgs. CO-96-97.
[190] DEIR, pg. 4.6-11—13.
[191] DEIR Appendix G.

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formal mitigation measures, these PDFs are neither mandatory nor enforceable. Nevertheless, the DEIR assumes that the PDFs will be implemented and will reduce the Project's impacts, and are used as supported for the conclusion that impacts will be less than significant. For example, in analyzing whether the Project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides, the DEIR states "the Project would implement Project Design Features PDF-GEO-1, PDF-GEO-2, PDF-GEO-3, and PDF-GEO-7 to ensure soil stability within the Project Site."[192] The DEIR concludes that potential impacts with regard to potential landslides are "less than significant without mitigation."[193] The DEIR similarly assumes the implementation of various PDFs to support its findings of no significant impact without mitigation with respect to seismic ground shaking, subsidence and expansive soils.[194]

O6-22
Continued

As with the DEIR's improper use of PDFs with respect to air quality impacts, the DEIR's geology impact analysis violates CEQA as it improperly "compress[es] the analysis of impacts and mitigation measures into a single issue."[195] The DEIR must be revised to assess and disclose the Project's geology impacts without consideration of the optional and unenforceable PDFs, and to require that any and all mitigation measures that are intended to reduce geology impacts are incorporated as binding mitigation in the Project's MMRP.

B. The DEIR's Energy Impact Analysis Improperly Relies on Project Design Features to Conclude that the Project's Energy Impacts Are Less Than Significant

O6-23

The DEIR states "no specific Project Design Features are proposed with respect to energy resources. However, Project Design Features PDF-GHG-1 and PDF-GHG-2 in Section 4.7, Greenhouse Gas Emissions, of this Draft EIR would reduce the Project's energy consumption."[196] As an initial matter, there is no PDF-GHG-2 in the DEIR, only PDF-GHG-1, which proposes that "[s]ubject to City and other agency approvals, rooftop photovoltaic (PV) systems and solar panels will be

[192] DEIR, pg. 4.6-14.
[193] *Id.,* pg. 4.6-15.
[194] DEIR, pgs. 4.6-13, 4.6-17 and 4.6-18.
[195] *Lotus, supra,* 223 Cal. App. 4th at 651-52
[196] DEIR, pg. 4.5-9.

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installed for all the sound stage buildings and the support building for localized use."[197]

With respect to whether Project would result in potentially significant impact due to wasteful, inefficient or unnecessary consumption of energy resources, the DEIR discusses energy use associated with transportation and includes the following statement: "the Project Site would provide EV charging stations and EV-ready parking spaces pursuant to Project Design Feature PDF-GHG-1, which would reduce fuel usage. Although the EV charging stations would represent an increase in electricity use, the resulting use of EVs would offset gasoline and/or diesel fuel consumption."[198] The DEIR concludes "[b]ased on the above, the Project would not involve the inefficient, wasteful and unnecessary use of energy during operation, and operational impacts would be less than significant."[199]

As set forth above, PDF-GHG-1 refers to rooftop solar, not EV chargers. The DEIR's reference to a nonexistent PDF relating to EV chargers makes it impossible to know what assumptions are being used to conclude that the Project will not involve the inefficient, wasteful and unnecessary use of energy. At a minimum, the DEIR must be revised to clarify this inconsistency.

O6-23
Continued

With respect to whether the Project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency, the DEIR states "in accordance with PDF-GHG-1 and PDF-GHG-2, the Project Site would provide EV charging stations and EV-ready parking spaces pursuant to the requirements of the CALGreen Code, and install rooftop PV systems and solar panels for all the sound stage buildings and the support building for localized use. As the Project would be required to comply with these regulations, and would exceed the requirements of these regulations with the implementation of Project Design Features, the Project would not conflict with or obstruct state plans for renewable energy or energy efficiency."[200] Again, the DEIR inexplicably relies on a nonexistent PDF relating to EV chargers in its energy impact analysis. It also assumes the implementation of optional, unenforceable PDF-GHG-1 with respect to rooftop solar. It is also notable that the DEIR declined to consider PDF-GHG-1 in its GHG analysis, as "the amount of solar that will be incorporated based on Title 24 requirements is not known at this time."[201] Despite this uncertainty and the decision to not consider

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[197] *Id.,* pg. 4.7-12. This PDF proposing rooftop solar was not incorporated into the GHG impact analysis because "the amount of solar that will be incorporated based on Title 24 requirements is not known at this time." DEIR, pg. 4.7-13 and Appendix C, pg. 41.
[198] DEIR, pg. 4.5-11.
[199] DEIR, pg. 4.5-12.
[200] *Id.*
[201] DEIR, pg. 4.7-13 and Appendix C, pg. 41.

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rooftop solar in its GHG analysis, the DEIR assumes the use of some undisclosed amount rooftop solar to support its conclusions regarding energy impacts.

For the reasons explained above, the DEIR must be revised to assess and disclose the Project's energy impacts without consideration of an uncertain, optional and unenforceable PDF, and to require that any and all mitigation measures that are intended to reduce energy impacts are incorporated as binding mitigation in the Project's MMRP. O6-23 Continued

C. The DEIR's Public Services Impact Analysis Improperly Relies on Project Design Features to Conclude that Project Impacts on Public Services Are Less Than Significant

The DEIR proposes PDF-PUB-1 through PDF-PUB-4 relating to fire department access and Project site security.[202] These PDFs are used to support findings that the Project would not result in significant impacts with respect to public services. For example, the DEIR states "[w]ith implementation of Project Design Features PDF-PUB-2 through PDF-PUB-4 and upon approval of required reviews and permits by the LASD, the Project, including the off-site improvements, would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection."[203] The DEIR therefore concludes that impacts with respect to police protection would be less than significant without mitigation.[204] The DEIR makes similar improper findings with respect to fire protection by assuming the implementation of PDF-PUB-1.[205] O6-24

For the reasons explained above, the DEIR must be revised to assess and disclose the Project's public services impacts without consideration of optional and unenforceable PDFs, and to require that any and all mitigation measures that are intended to reduce public service impacts are incorporated as binding mitigation in the Project's MMRP.

[202] DEIR, pg. 4.13-8.
[203] *Id.,* pg. 4.13-11.
[204] *Id.*, pg. 4.13-12.
[205] *Id.,* pg. 4.13-10.

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D. The DEIR's Wildfire Impact Analysis Improperly Relies on Project Design Features to Conclude that Project Impacts on Wildfires Are Less Than Significant

The DEIR proposes PDF-WF-1 through WF-4 with respect to wildfire risk and hazards.[206] These PDFs are improperly used to support findings that the Project will not result in significant impacts with respect to wildfire risk.[207] For the reasons explained above, the DEIR must be revised to assess and disclose the Project's impacts with respect to wildfire without consideration of optional and unenforceable PDFs, and to require that any and all mitigation measures that are intended to reduce wildfire impacts are incorporated as binding mitigation in the Project's MMRP. O6-25

XI. CONCLUSION

For the reasons discussed above, the DEIR for the Project is wholly inadequate under CEQA. It must be revised to provide legally adequate analysis of, and mitigation for, all of the Project's potentially significant impacts. These revisions will necessarily require that the DEIR be recirculated for additional public review. Until the DEIR has been revised and recirculated, as described herein, the City may not lawfully approve the Project. O6-26

Thank you for your consideration of these comments. Please include them in the record of proceedings for the Project.

Sincerely,

Richard M. Franco

Attachments
RMF:acp

[206] *Id.*, pg. 4.17-10.
[207] *Id.*, pg. 4.7-13.

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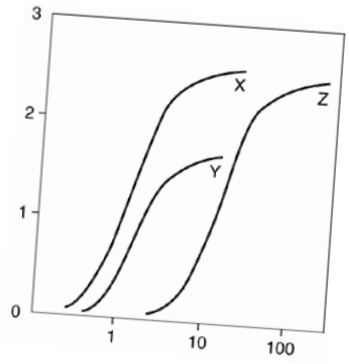
EXHIBIT A



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May 20, 2023

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Mr. Richard Franco

Subject: Comment Letter on Draft Environmental Impact Report (DEIR) Shadowbox Studios Project, SCH NO. 2022030762.

Dear Mr. Franco:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the DEIR. If we do not comment on a specific item, this does not constitute acceptance of the item.

Project Description: O6-27

The Shadowbox Studios Project (Project) is proposed to be located in the southwestern portion of the City of Santa Clarita (City), in the Newhall community, approximately 2 miles east of Interstate 5 (I-5), 2 miles west of the Antelope Valley Freeway (State Route 14), and 2 miles south of the Santa Clara River. The Project Site is located at the northeastern corner of Railroad Avenue and 13th Street. The Project Site is bounded by 12th Street, Arch Street, and 13th Street on the south; a railroad right-of-way (ROW) and Railroad Avenue on the west; the Metropolitan Water District ROW on the east; and slopes maintained by residential properties to the north.

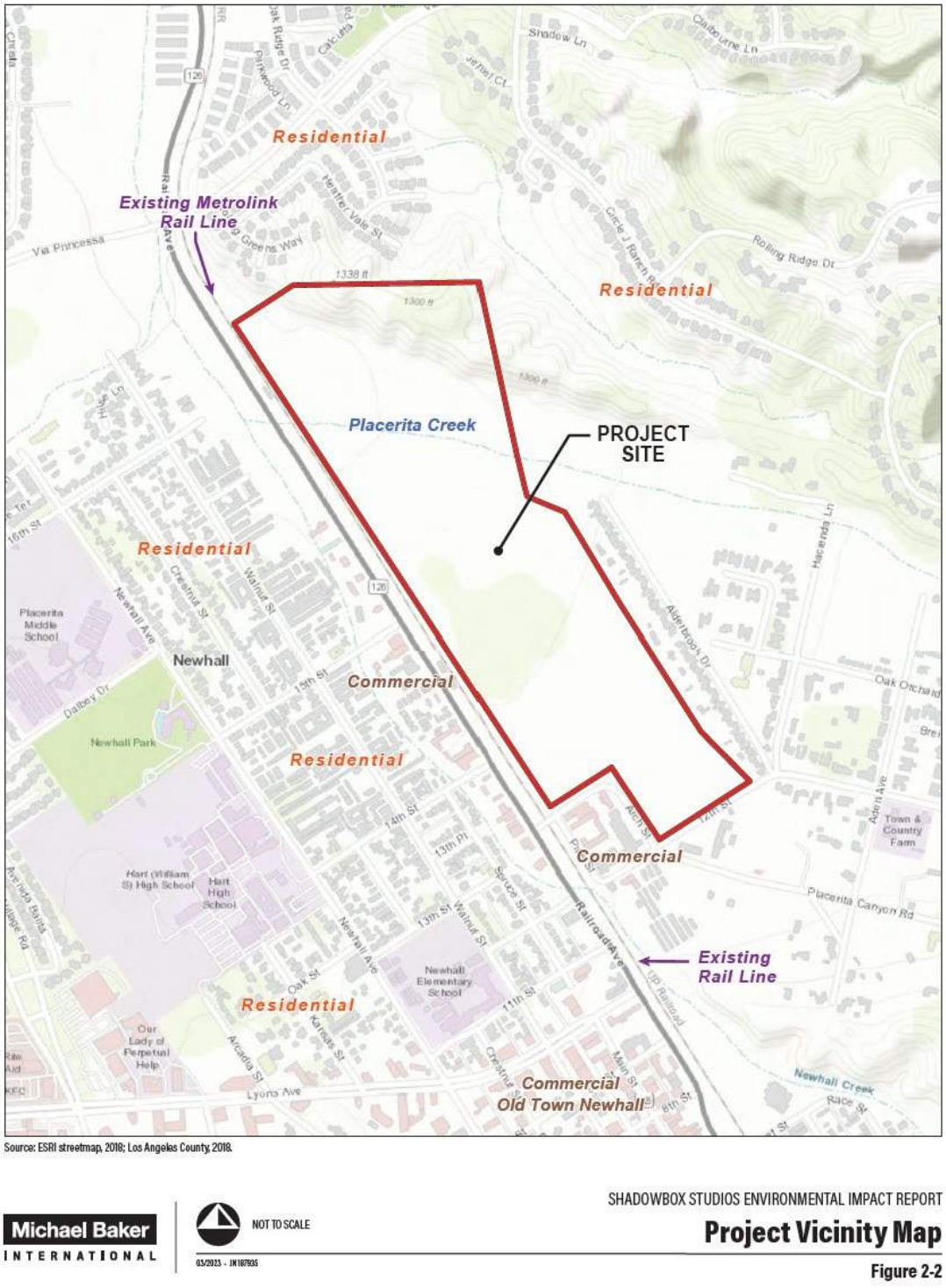


Figure 1: Project Vicinity Map

O6-27
Continued

According to the DEIR, the Project proposes to develop a full-service film and television studio campus on a vacant 93.5-acre site and would consist of approximately 475,500 square feet of sound

stages; approximately 565,400 square feet of workshops, warehouses, and support uses; approximately 209,300 square feet of production and administrative offices; and approximately 35,600 square feet of catering and other specialty services. Upon completion, the campus would have an overall building area of approximately 1,285,000 square feet.

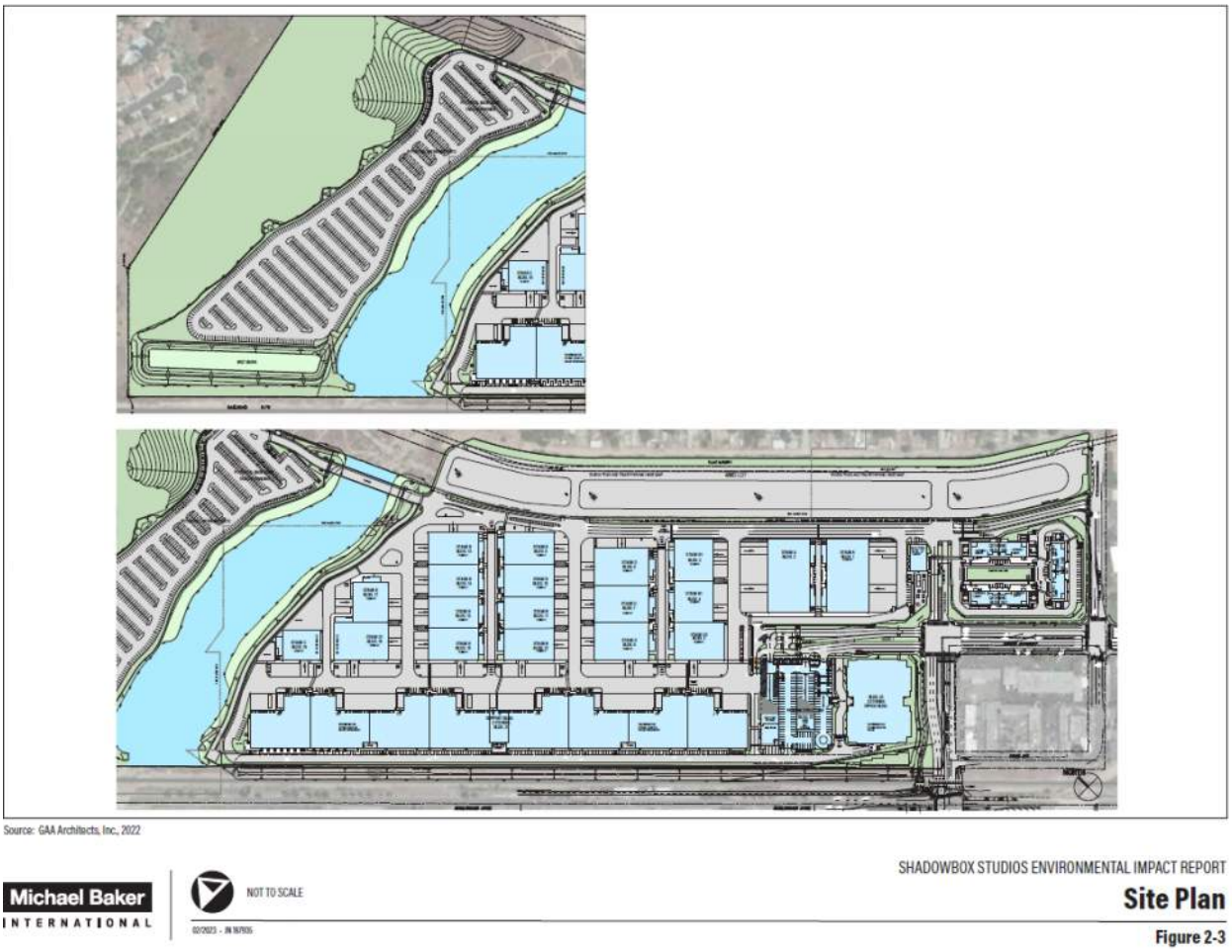


Figure 2: Project Site Plan

The Project would involve construction of 19 sound stages, a large support building, a parking structure, an office building, a catering building, and a mechanical building south of Placerita Creek. All 19 sound stage buildings would be situated in the center of the Project Site. The three-story office building and five-level parking structure are proposed at the northeastern corner of Railroad Avenue and 13th Street. The two-story support building would extend along Railroad Avenue south of Placerita Creek. Other proposed ancillary and specialty use buildings include a catering building, and a mechanical building with a substation located to the east and southeast of the main entrance at the intersection of Arch Street and 13th Street.

O6-27
Continued

The DEIR concludes that no mitigation is required to prevent impacts from the project on air quality in the area. This conclusion is in conflict with the facts provided within the DEIR. O6-28

Specific Comments:

1. The City's Air Quality Analysis Failed To Perform A Quantitative Health Risk Assessment Of The Impacts Of Toxic Air Contaminants (including Diesel Particulate Matter (DPM) and Other Air Toxins) Emissions From The Construction Phase Of The Project For The Nearest Sensitive Receptor(s)

In Appendix C to the DEIR[1], the City states in Impact AQ-3 that construction and operation of the project would not result in emissions of TACs (toxic air contaminants) sufficient to exceed applicable health risk criteria. According to Rincon, [2] the generation of DPM from construction projects occur in a single area for a short period. Construction of the proposed project would occur over approximately 29 months. O6-29

The assumption that a health risk analysis of the construction and operational emissions were below a significant level because local significant thresholds (LSTs) were not exceeded for pollutants being released from the Project is not valid. According to SCAQMD[3], LSTs are only applicable to criteria pollutants: oxides of nitrogen (NO_X), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) and particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), not to TACs. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

The City failed to perform any quantitative risk analysis, and therefore lacks supporting evidence for its conclusion that the Project would not result in significant health effects. The City's

[1] Rincon. 2023. Blackhall Studios-Santa Clarita Project Air Quality and Greenhouse Gas Emissions Study. February 2023. Pg 36

[2] Rincon. 2023. Blackhall Studios-Santa Clarita Project Air Quality and Greenhouse Gas Emissions Study. February 2023. Pg 37

[3] http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds

failure to perform such an analysis is clearly a major flaw in the DEIR and may be placing the residents of the adjacent structures at risk from the construction and operational phases of the Project.

Under CEQA the City is required to provide a detailed health risk analysis for all projects that emit TACs with potential human exposure. TACs, including diesel particulate matter (DPM)[4], contribute to a host of respiratory impacts and may lead to the development of various cancers. Failing to quantify those impacts places the community at risk for unwanted adverse health impacts. *Even brief exposures to the TACs could lead to the development of adverse health impacts over the life of an individual*.

Diesel exhaust contains nearly 40 toxic substances, including TACs and may pose a serious public health risk for residents in the vicinity of the facility. TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

O6-29
Continued

Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death.[5,6,7] Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.[8] Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung

[4] Because DPM is a TAC, it is a different air pollutant than criteria particulate matter (PM) emissions such as PM10, PM2.5, and fugitive dust. DPM exposure causes acute health effects that are different from the effects of exposure to PM alone.

[5] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998; see also California Air Resources Board, Overview: Diesel Exhaust & Health, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health#:~:text=Diesel%20Particulate%20Matter%20and%20Health&text=In%201998%2C%20CARB%20identified%20DPM,and%20other%20adverse%20health%20effects.

[6] U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002.

[7] Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005; http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf, accessed July 5, 2020.

[8] California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.

tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.[9] DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it contains toxic materials, unlike $PM_{2.5}$ and PM_{10}.[10]

The inherent toxicity of the TACs requires the City to first quantify the concentration released into the environment at each of the sensitive receptor locations through air dispersion modeling, calculate the dose of each TAC at that location, and quantify the cancer risk and hazard index for each of the chemicals of concern. Following that analysis, then the City can make a determination of the relative significance of the emissions.

O6-29
Continued

According to the Operational Criteria Pollutant Emissions table from the Air Quality Analysis, the Project is expected to generate 0.9312 lbs of DPM exhaust per day from the generators. This equates to 0.2328 lbs of DPM per hour of operation of the generators. The assumptions buried in the DEIR are that the generators will run no more than 54 hours per year, equating to 12.5712 lbs per year of DPM or 0.0062856 tons of DPM per year.

[9] Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel's April 22, 1998 Meeting.

[10] Health & Safety Code § 39655(a) (defining "toxic air contaminant" as air pollutants "which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.")

Operational Criteria Pollutant Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	28	<1	1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	21	23	220	<1	56	15
Generators	1.2696	24.5376	27.4992	0.06348	0.9312	0.9312
food truck consumer product	0.0277		1.40E-04			
Project Summer Emissions	51	49	248	<1	57	16
Winter Emissions						
Area	28	<1	1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	20	24	212	<1	56	15
Generators	1.2696	24.5376	27.4992	0.06348	0.9312	0.9312
food truck consumer product	0.0277		1.40E-04			
Project Winter Emissions	50	50	240	<1	57	16
Project Emissions	**51**	**50**	**248**	**<1**	**57**	**16**
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; VOC = volatile organic compounds; NOx = nitrogen oxide; CO = carbon monoxide; SOx = sulfur oxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns

Notes: Some numbers may not add up precisely due to rounding considerations.

O6-29
Continued

Assuming that the sources of the DPM (the generators) are located near the center of the facility, it is possible to model the impacts on the residents immediately adjacent to the Project Site on Alderbrook Drive. Assuming that emissions are spread over the entire year, including weekdays and weekends, it is possible to calculate an averaged emissions of DPM in the community from the Project Site. Using AERMOD, the US EPA's preferred air dispersion model, it is possible to calculate the concentrations of DPM from the operational phase at the closest receptors located Alderbrook Drive and the other residences along Alderbrook. AERMOD is an acronym for the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee's Dispersion Model. AERMOD contains the necessary algorithms to model air concentrations from a wide range of emission source types, including stack-based point sources,

fugitive area sources, and volume sources. The modeling domain with the building around the Project site are indicated in the figure below.

Figure 3: Model Domain

O6-29
Continued

Assuming an annual average emission of 0.0062856 tons of DPM per year from the generators, I have modeled the ground-level concentrations of DPM at the receptors indicated above. The maximum concentration modeled on an annual basis is 0.023 ug/m^3 of DPM.

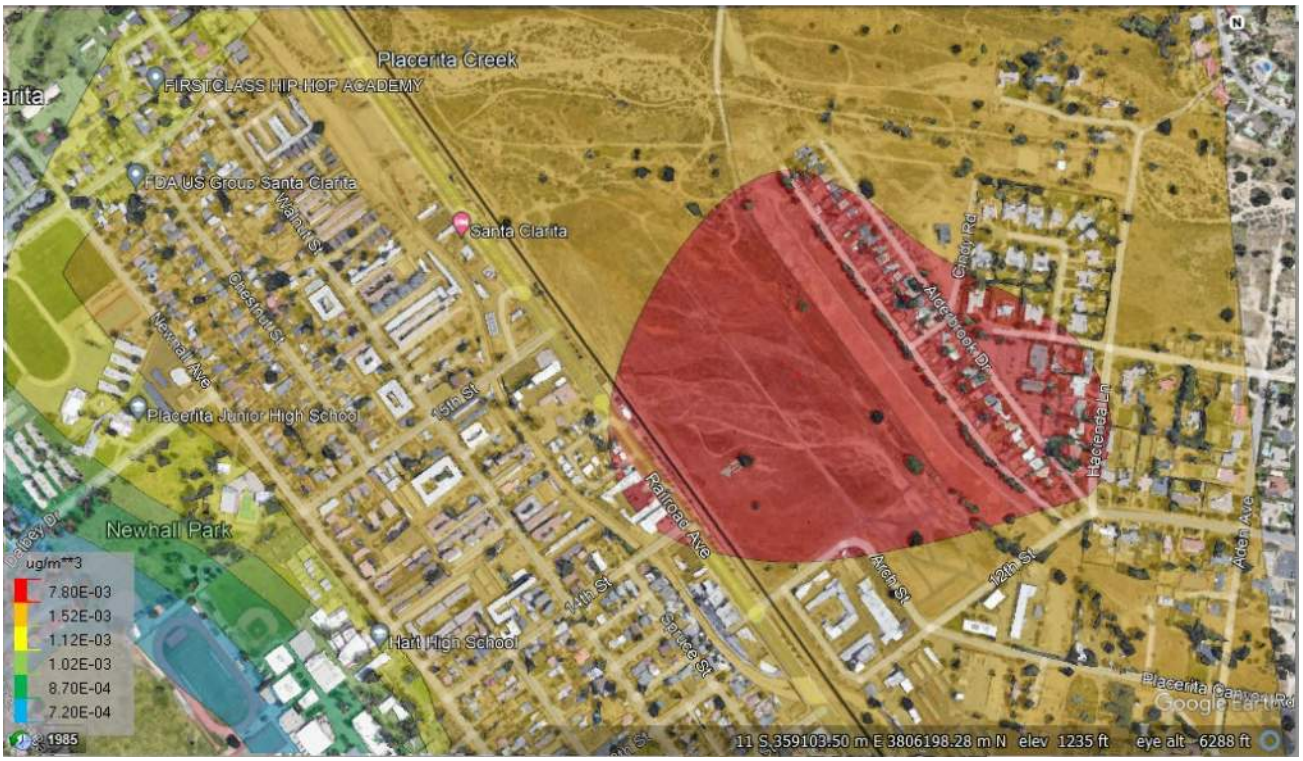


Figure 4: DPM Concentrations From Generators On Site

Using the OEHHA's HARP 2 Standalone Risk software, I calculated the cancer risk for the general population living at 16992 Abbey Lane. The cumulative risk for exposure to DPM for the operational phase was calculated to be 19.899 in 1,000,000, much greater than the 10 in 1,000,000 threshold outlined by SCAQMD resulting in a significant impact. The results of the air model and the health risk analysis are attached as an appendix to this letter.

By relying on the Air Quality Management Plan (AQMPs) control strategies for construction equipment and other activities to mitigate DPM emissions, and localized significance thresholds (LSTs) which analyze criteria pollutants but do not specifically evaluate TACs, the City cannot attest as to whether there is a cancer risk presented to the community by the Project. The City must address this concern by performing an air dispersion model of the sources on site and off site, quantify the annual concentrations of DPM for each of the receptors, perform a health risk assessment of the DPM concentrations consistent with the California Air Resources Board Toxic Hot Spot Guidance, and present the results in a revised DEIR.

O6-29
Continued

2. Air Quality Analysis Fails To Require The Use Of Tier 4 Final Technology For Off-Road Sources Of Diesel Exhaust On-Site.

As a project design feature (a non-enforceable control measure), the DEIR is claiming that off-road diesel-powered construction equipment would meet or exceed the CARB and USEPA Tier 3 off-road emissions standards and would be equipped with Level 3 diesel particulate filters at a minimum. The DIER fails to require that the best emission technology level, Tier 4 Final, be used on the construction equipment with a horsepower (hp) rating greater than 25 hp.

Blackhall Studios AQ with Tier 3 engines - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Default CalEEMod equipment for all phases

Trips and VMT - Maximum onsite emissions and due to size assuming that some of the construction truck trips are onsite and traveling the length of the project site (approx. 0.8 miles) so worker trip lengh increased to 15.5 to accomodate the additional site crossing.

Grading - There would be no import or export onsite. Balanced site.

Architectural Coating - SCAQMD Rule 1113, Building Envelope Coating = 50 g/L and Flats = 50 g/L

Vehicle Trips - Since Both stage (trip rate 5.91) and Production Support (trip rate 4.14) are the same land use, trip rate used in the analysis is an adjusted weighted average to have daily trip generation more accurately reflect what is in the Traffic Study.

Area Coating - SCAQMD Rule 1113, Building Envelope Coating = 50 g/L and Flats = 50 g/L

Energy Use - Adjusted the electricity and natural gas amount using similar annual energy consumption from another film studio

Water And Wastewater - City of Santa Clarita wastewater treated at the Saugus or Valencia Water Reclamation Plan. 100% aerobic treatments https://www.lacsd.org/services/wastewater-sewage/santa-clarita-valley-water-reclamation-plants. Annual amount approx. 4,129,278

Solid Waste - Defaults

Construction Off-road Equipment Mitigation - SCAQMD Rule 403, watering and vehicle speed from Table 1 BACT applicable to all construction activity. Based on applicant information, the construction fleet >50 HP would be equipped with Tier 4 engines with level 3 DPF filters

Area Mitigation - Low VOC paint used based on SCAQMD requirements.

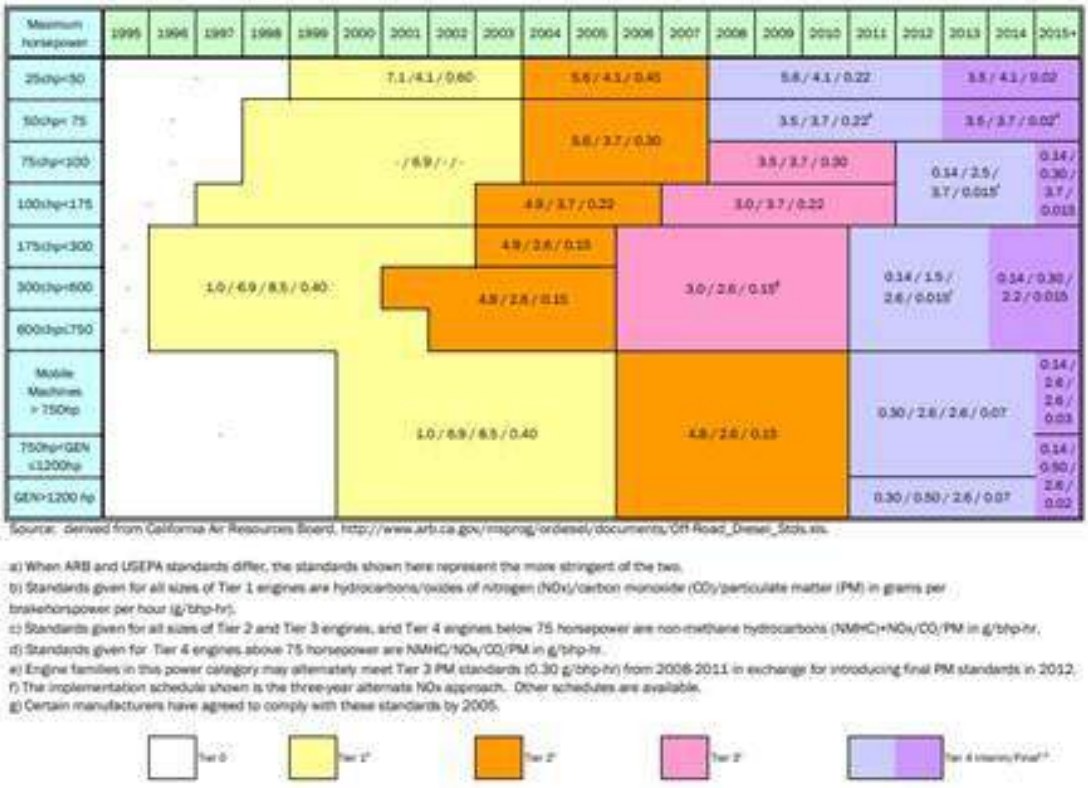
Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

O6-30

Allowing the construction phase to use a lower tiered engine will produce more PM_{10} and $PM_{2.5}$ emissions than is generally acceptable for Projects being developed in the South Coast Air Basin.

The United States Environmental Protection Agency (U.S. EPA) and by agreement, CARB, have slowly adopted more stringent standards to lower the emissions from off-road construction equipment since 1994. Since 1994, Tier 1, Tier 2, Tier 3, Tier 4 Interim, and Tier 4 Final construction equipment have been phased in over time. Tier 4 Final represents the cleanest burning equipment and therefore has the lowest emissions compared to other tiers, including Tier 4 Interim equipment.[11]



Source: derived from California Air Resources Board, http://www.arb.ca.gov/msprog/ordiesel/documents/Off-Road_Diesel_Stds.xls.

a) When ARB and USEPA standards differ, the standards shown here represent the more stringent of the two.
b) Standards given for all sizes of Tier 1 engines are hydrocarbons/oxides of nitrogen (NOx)/carbon monoxide (CO)/particulate matter (PM) in grams per brake-horsepower per hour (g/bhp-hr).
c) Standards given for all sizes of Tier 2 and Tier 3 engines, and Tier 4 engines below 75 horsepower are non-methane hydrocarbons (NMHC)+NOx/CO/PM in g/bhp-hr.
d) Standards given for Tier 4 engines above 75 horsepower are NMHC/NOx/CO/PM in g/bhp-hr.
e) Engine families in this power category may alternately meet Tier 3 PM standards (0.30 g/bhp-hr) from 2006-2011 in exchange for introducing final PM standards in 2012.
f) The implementation schedule shown is the three-year alternate NOx approach. Other schedules are available.
g) Certain manufacturers have agreed to comply with these standards by 2005.

When Tier 3 equipment is compared to Tier 4 Interim and Tier 4 Final equipment it is clear that the use of Tier 3 equipment would put out substantially more particulate matter (PM_{10} and $PM_{2.5}$).[12] ***Tier 3 equipment puts out 80% to 89% more PM_{10} than Tier 4 Interim equipment and***

O6-30
Continued

[11] "San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects." August 2015, *available at:* https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6.

[12] "San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects." August 2015, *available at:* https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6.

85% to 91% more PM_{10} than Tier 4 Final equipment. Tier 3 equipment puts out 81% to 89% more $PM_{2.5}$ than Tier 4 Interim equipment and 85% to 92% more $PM_{2.5}$ than Tier 4 Final equipment.

O6-30 Continued

The City must revise the DEIR to first disclose the Project's unmitigated emissions and then address the efficacy of mitigation using Tier 3, Tier 4 interim, and Tier 4 final certified equipment and disclose the impacts that will have on the adjacent communities..

3. The City's DEIR Fails To Identify All Of The Sensitive Receptors Within a ¼ Mile Radius of the Project Site.

The City's DEIR fails to address the impacts that the Project will have on all nearby sensitive receptors. In the Air Quality Analysis the City states that "Sensitive receptors that may be affected by air quality impacts associated with project construction and operation include single family residences on Alderbrook Drive and Circle J Ranch Road along the eastern project site boundary, residential development south of Wiley Canyon Road/Via Princessa along the northern project site boundary, a mobile home park 180 feet west across Railroad Avenue, and residential developments 500 feet to the southeast and 500 feet to the west." [13]

O6-31

In addition to the residences adjacent to the Project Site, there are two schools within 0.3 miles of the Project. Placerita Junior High School and Hart High School are located less than 0.3 miles from the boundary of the Project.

[13] Rincon. 2023. Blackhall Studios-Santa Clarita Project Air Quality and Greenhouse Gas Emissions Study. February 2023. Pg 12

Figure 5: Project Site Location and Nearby Sensitive Receptors

O6-31
Continued

Given the volume of TACs that will be emitted during the construction and operational phases of the Project and the proximity of the Project to the receptors, the City must assess the impacts to each of these receptors using a quantitative risk analysis program to ensure that adequate mitigation measures are in place prior to start of the construction phase of the Project. The failure to assess the risk *a priori* is a critical flaw in the City's analysis.

4. The Air Quality Analysis Of Operational Emissions Is Incomplete And Fails To Include Emissions From The Fire Pump System That Will Be Installed Onsite.

O6-32

According to the operations air quality analysis of Project provided in the DEIR[14] operational emissions were calculated using the CalEEMOD (Version 2020.4.0) software. In the CalEEMOD

[14] Rincon. 2023. Blackhall Studios-Santa Clarita Project Air Quality and Greenhouse Gas Emissions Study. February 2023. Pg 36

outputs provided in the air quality analysis no fire pump system is included in the analyses. To be compliant with the California Fire Code (CFC) and local fire authorities, the Project will be required to install a fire pump system.

Blackhall Studios AQ with Tier 3 engines - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

Figure 6: CalEEMOD Output

O6-32 Continued

The City's analysis is therefore incomplete and must be corrected in a revised DEIR for the Project.

5. The Greenhouse Gas (GHG) Analysis Attributes Reductions To Energy Use/Generator Over Time That Are Not Currently Achievable.

O6-33

Rincon's assessment of the GHG emissions and the reductions in GHG emissions that are predicated are based on a number of false premises. Firstly, the air quality analysis assumes that 8,627 MT CO_{2e} are attributable to mobile sources.

Table 12 Reduced Full Buildout Combined Annual Emissions

Emission Source	Annual Emissions (MT CO_2e)
Construction[1]	**196**
Operational	**7,056**
Area	<1
Energy	1,688
Additional RPS Reduction	(183)
Mobile	8,627
EV Charging Stations	(3,357)
Solid Waste	774
AB 341	(581)
Water	12
Generators	37
Food Trucks	39
Total	**7,252**

MT CO_2e = metric tons of carbon dioxide equivalent; parenthetical values represent negative numbers; values may not add directly due to rounding.

[1] Amortized construction related GHG emissions over 30 years

[2] Food Truck emissions account for electricity and waste emissions only. Mobile emissions are assumed to be part of the anticipated daily emissions quantifications and are included under mobile emissions.

Source: Appendix A CalEEMod worksheets

O6-33
Continued

The air quality analysis then assumes that installation of EV charging stations will reduce the GHG emissions from mobile sources by 3,357 MT CO_{2e}. This is based on 172 EV charging stations out of 3,435 total parking spaces.

Estimated GHG Emissions Reductions to replace gasoline vehicles with Electric Vehicles

		Conversion Factors:
Project Electricity Emission Factor[1]	0.14	2204.62 lb/MT
Electric Vehicle Fuel Economy[2]	0.25	1.00E-06 MT/gram
Gasoline CO_2e Emissions while Running[3]	249	0.001 MWh to KWh
Annual VMT Reduction per charging Station[4]	91,250	
Number of parking spaces	3,435	
% Charging capability	20%	
Number of spaces requiring charging infrastructure	687	
% requiring charging stations	25%	
Number of Chargers[5]	172	
Annual VMT Reduction All Stations (based on Charge)	15,672,188	

Estimated Benefit from Installing Electric Vehicle Charging Stations.

GHG Emissions of Gasoline vehicles	3,902	$MTCO_2e/yr$
GHG Emisssions of Electric Vehicles	545	$MTCO_2e/yr$
Net Reduction in Emissions	3,357	$MTCO_2e/yr$
Emissions/station	19.55	$MTCO_2e/yr$

The approximate 40% reduction in GHG emissions attributable to vehicles using the Project is

attributed to around 5% of the parking spaces on site. The math behind that calculation does not make sense. The City must re-evaluate the significant GHG impacts from the Project by requesting the preparation of a revised DEIR.

O6-33 Continued

Conclusion

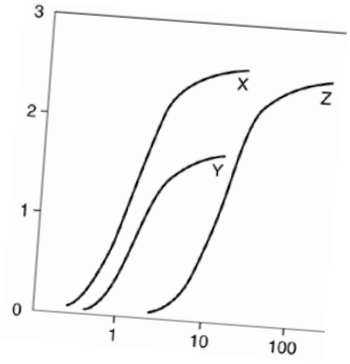
The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant impacts (including an increase in the potential for residents along Alderbrook Avenue to be exposed to DPM, resulting in an increased health risk) if allowed to proceed. A revised DEIR should be prepared to address these substantial concerns.

O6-34

Sincerely,

Exhibit A:

Curriculum Vitae



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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well-recognized toxicologist, air modeler, and health scientist specializing in dose reconstruction. He has 30 years of experience in tying together environmental contaminants measurements to human health impacts. Using environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling, RESRAD, GENII); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); Dr. Clark has testified in Federal and State courts on dose reconstructions for personal injury and in mass tort claims.

LITIGATION SUPPORT

1. Ann Jordan, Bruce Howard Brown, David Gutierrez, Amber Tuffield, Geraldine Valdez, Martha Ann Ratzloff, Bradley Schaak, Cindy Fuhrmann, ,Kay Noble, Cynthia Bauman, and Susan Kaberline v. Terumo-BCT Sterilization Services, Inc. a Colorado Corporation, and Terumo BCT, Inc., a Colorado Corporation. Blake Richard Darnell v. Terumo BCT Sterilization Services, Inc. Terumo BCT, Inc., and John Does No. 1-20. District Court, Jefferson County, Colorado. Case Number 2020CV031457, Case Number 2021CV030474 (consolidated with 2020CV031457), Case Number 2020CV031481.
   Client: Edelson PC & Zaner Harden Law, Denver, Colorado
2. Charles Johnson, Jr. v. BP Exploration & Production Inc., and BP America Production Company United States District Court Eastern District of Louisiana. Case No. 20-01329
   Client: Downs Law Group, Coconut Grove, Florida

3. Deepwater Horizon BELO Cases. (Kenneth Davenport, 5:18-cv-245); (Lester Jenkins, 5:19-cv-260); (Micheal Moulder, 5:19-cv-12); (Dwight Stiples, 5:19-cv-310). United States District Court Northern District of Florida, Pensacola Division. Case 3:19cv363
   Client: Downs Law Group, Coconut Grove, Florida
4. James Noel v. BP Exploration and Production Inc. et al. United States District Court Southern District of Alabama (Mobile) Civil Action No 1:19-cv-00694
   Client: Downs Law Group, Coconut Grove, Florida
5. Richard Allen Dufour v. BP Exploration and Production Inc. et al. U.S District Court Southern District of Mississippi Southern Division Civil Action No. 19-cv-00591
   Client: Downs Law Group, Coconut Grove, Florida
6. Client: Marc and Jill Czapla v. Republic Services, Inc., Bridgeton Landfill, LLC, vs. Cotter Corporation, N.S.L., Circuit Court of St. Louis County, State of Missouri, Division 17
   Client: Humphrey, Farrington & McClain, P.C., Independence, Missouri
7. Don Strong, et al. vs. Republic Services, Inc., Bridgeton Landfill, LLC, vs. Cotter Corporation, N.S.L., Case No.: 17SL-CC01632-01 Circuit Court of St. Louis County, State of Missouri, Division 17
   Client: Humphrey, Farrington & McClain, P.C., Independence, Missouri
8. Arnold Goldstein, Hohn Covas, Gisela Janette La Bella, et al.. vs. Exxon Mobil Corporation, PBF Energy Inc., Torrance Refining Company LLC, et al., Case No.: 2:17-cv-02477DSF United States District Court for the Central District of California
   Client: Sher Edling, LLP, San Francisco, California and Matern Law Group , PC., El Segundo, California
9. Mary Ann Piccolo V. Headwaters Incorporated, et al. Seventh Judicial Court In and For Carbon County, State of Utah. Case No. 130700053
   Client: Law Offices of Roy L. Mason. Annapolis, Maryland
10. Case: Tracey Coleman V. Headwaters Incorporated, et al. Seventh Judicial Court In and For Carbon County, State of Utah. Case No. 140902847
    Client: Law Offices of Roy L. Mason. Annapolis, Maryland
11. Case: Scott D. McClurg, et al. v. Mallinckrodt Inc. and Cotter Corporation. Lead Case No.: 4:12CV00361 AGF United States District Court Eastern District of Missouri Eastern Division.
    Client: Environmental Law Group, Birmingham, AL.
12. Louise Kowall, Donna Kopecek, and Evelyn Vehouc v, United States Steel Corporation. Count of Common Pleas of Washington County, Pennsylvania Civil Division. Case No. 2017-3355
    Client: Bonnet, Fairbourn, Friedman & Balint, PC, Phoenix, Arizona, Jacks Legal Group, PLLC, Morgantown, West Virginia, and The Calwell Law Practice, LC, Charleston, West Virginia.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client(s) – Multiple

Indoor Air Evaluations, California: Performed multiple indoor air screening evaluations and risk characterizations consistent with California Environmental Protection Agency's (Cal/EPA) Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Board (RWQCB) methodologies. Characterizations included the use of DTSC's modified Johnson & Ettinger Model and USEPA models, as well as the attenuation factor model currently advocated by Cal/EPA's Office of Environmental Health and Hazard Assessment (OEHHA).

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model were used to estimate acute and chronic exposure concentrations to multiple contaminants and were be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark managed the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Immanent and Substantial Endangerment Order. Dr. Clark assisted the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of

pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Past Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

Sullivan, P., **J.J. J. Clark,** F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment.* Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment.* Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equialency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

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Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research.* 105:194-199.

Rosenfeld, P.E., **Clark, J. J.,** Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

Clark, J.J.J. 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophnoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.

Clark, J.J.J., Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.

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Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Clark, J.J.J., Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.

Clark J.J.J., Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.

Clark, J.J.J.; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. Toxicologist. 30(1):14.

Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. Toxicologist. 30(1):117-118.

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EXHIBIT B

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** BREEZE AERMOD
** Trinity Consultants
** VERSION  11.0

CO STARTING
CO TITLEONE  DPM Concenrations
CO MODELOPT  DFAULT  CONC  NODRYDPLT  NOWETDPLT
CO RUNORNOT  RUN
CO AVERTIME  24  ANNUAL
CO POLLUTID  DPM
CO FINISHED

SO STARTING
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SO FINISHED

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ME UAIRDATA  3190 2012
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** Trinity Consultants
** VERSION  11.0

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RE DISCCART  359670.2  3806099.7  382.88  382.88
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806099.7  383.22  383.22
** RCPDESCR  homes 2
RE DISCCART  359770.2  3806099.7  384  384
** RCPDESCR  homes 2
RE DISCCART  359820.2  3806099.7  384.41  384.41
** RCPDESCR  homes 2
```

```
RE DISCCART  359870.2  3806099.7  385.22  385.22
** RCPDESCR  homes 2
RE DISCCART  359920.2  3806099.7  386  386
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806149.7  380.72  380.72
** RCPDESCR  homes 2
RE DISCCART  359570.2  3806149.7  381.34  381.34
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806149.7  382  382
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806149.7  382.64  382.64
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806149.7  383  383
** RCPDESCR  homes 2
RE DISCCART  359770.2  3806149.7  383.91  383.91
** RCPDESCR  homes 2
RE DISCCART  359820.2  3806149.7  384  384
** RCPDESCR  homes 2
RE DISCCART  359870.2  3806149.7  384.94  384.94
** RCPDESCR  homes 2
RE DISCCART  359920.2  3806149.7  385.9  385.9
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806199.7  380.17  380.17
** RCPDESCR  homes 2
RE DISCCART  359570.2  3806199.7  381  381
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806199.7  381.27  381.27
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806199.7  382  382
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806199.7  383  383
** RCPDESCR  homes 2
RE DISCCART  359770.2  3806199.7  383.05  383.05
** RCPDESCR  homes 2
RE DISCCART  359470.2  3806249.7  379.03  379.03
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806249.7  379.88  379.88
** RCPDESCR  homes 2
RE DISCCART  359570.2  3806249.7  380.73  380.73
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806249.7  381.03  381.03
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806249.7  381.88  381.88
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806249.7  382.38  382.38
** RCPDESCR  homes 2
RE DISCCART  359420.2  3806299.7  378.38  378.38
** RCPDESCR  homes 2
RE DISCCART  359470.2  3806299.7  379  379
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806299.7  379.72  379.72
** RCPDESCR  homes 2
RE DISCCART  359570.2  3806299.7  380.34  380.34
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806299.7  381  381
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806299.7  381.64  381.64
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806299.7  382  382
** RCPDESCR  homes 2
RE DISCCART  359420.2  3806349.7  378.09  378.09
** RCPDESCR  homes 2
RE DISCCART  359470.2  3806349.7  379  379
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806349.7  379.72  379.72
** RCPDESCR  homes 2
```

```
RE DISCCART  359570.2  3806349.7  380  380
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806349.7  381  381
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806349.7  381  437
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806349.7  382  437
** RCPDESCR  homes 2
RE DISCCART  359370.2  3806399.7  377.72  377.72
** RCPDESCR  homes 2
RE DISCCART  359420.2  3806399.7  378  378
** RCPDESCR  homes 2
RE DISCCART  359470.2  3806399.7  379  379
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806399.7  379  379
** RCPDESCR  homes 2
RE DISCCART  359570.2  3806399.7  380  435
** RCPDESCR  homes 2
RE DISCCART  359620.2  3806399.7  380.05  437
** RCPDESCR  homes 2
RE DISCCART  359670.2  3806399.7  381  438
** RCPDESCR  homes 2
RE DISCCART  359720.2  3806399.7  381.38  438
** RCPDESCR  homes 2
RE DISCCART  359770.2  3806399.7  382.59  442
** RCPDESCR  homes 2
RE DISCCART  359370.2  3806449.7  377  405
** RCPDESCR  homes 2
RE DISCCART  359420.2  3806449.7  378  378
** RCPDESCR  homes 2
RE DISCCART  359470.2  3806449.7  378.91  434
** RCPDESCR  homes 2
RE DISCCART  359520.2  3806449.7  379  435
** RCPDESCR  homes 2
RE DISCCART  358460.6  3805608.3  380.97  380.97
** RCPDESCR  schools
RE DISCCART  358560.6  3805608.3  380.92  380.92
** RCPDESCR  schools
RE DISCCART  358660.6  3805608.3  376.89  376.89
** RCPDESCR  schools
RE DISCCART  358360.6  3805708.3  378.06  378.06
** RCPDESCR  schools
RE DISCCART  358460.6  3805708.3  379.22  379.22
** RCPDESCR  schools
RE DISCCART  358560.6  3805708.3  375.17  375.17
** RCPDESCR  schools
RE DISCCART  358660.6  3805708.3  375.64  375.64
** RCPDESCR  schools
RE DISCCART  358760.6  3805708.3  376  376
** RCPDESCR  schools
RE DISCCART  358360.6  3805808.3  378.08  378.08
** RCPDESCR  schools
RE DISCCART  358460.6  3805808.3  375.83  382
** RCPDESCR  schools
RE DISCCART  358560.6  3805808.3  374.2  374.2
** RCPDESCR  schools
RE DISCCART  358660.6  3805808.3  375  375
** RCPDESCR  schools
RE DISCCART  358760.6  3805808.3  376  376
** RCPDESCR  schools
RE DISCCART  358360.6  3805908.3  374.89  374.89
** RCPDESCR  schools
RE DISCCART  358460.6  3805908.3  373  373
** RCPDESCR  schools
RE DISCCART  358560.6  3805908.3  373.69  373.69
** RCPDESCR  schools
```

```
RE DISCCART  358660.6  3805908.3  374.95  374.95
** RCPDESCR  schools
RE DISCCART  358360.6  3806008.3  372.58  372.58
** RCPDESCR  schools
RE DISCCART  358460.6  3806008.3  372  372
** RCPDESCR  schools
RE DISCCART  358560.6  3806008.3  372.9  372.9
** RCPDESCR  schools
RE DISCCART  358260.6  3806108.3  372.28  372.28
** RCPDESCR  schools
RE DISCCART  358360.6  3806108.3  371.96  371.96
** RCPDESCR  schools
RE DISCCART  358460.6  3806108.3  371  371
** RCPDESCR  schools
RE DISCCART  358560.6  3806108.3  372  372
** RCPDESCR  schools
RE DISCCART  358160.6  3806208.3  371  371
** RCPDESCR  schools
RE DISCCART  358260.6  3806208.3  371  371
** RCPDESCR  schools
RE DISCCART  358360.6  3806208.3  371  371
** RCPDESCR  schools
RE DISCCART  358460.6  3806208.3  370  370
** RCPDESCR  schools
RE DISCCART  358160.6  3806308.3  371  371
** RCPDESCR  schools
RE DISCCART  358260.6  3806308.3  370.61  370.61
** RCPDESCR  schools
RE DISCCART  358360.6  3806308.3  370  370
** RCPDESCR  schools
RE DISCCART  358260.6  3806408.3  370  370
** RCPDESCR  schools
RE DISCCART  358360.6  3806408.3  369.28  369.28
** RCPDESCR  schools
RE FINISHED

ME STARTING
ME SURFFILE  "C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC -
Shadowbox Studio, Santa Clarita\KVNY_V9_ADJU\KVNY_v9.SFC"
** SURFFILE  "C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC -
Shadowbox Studio, Santa Clarita\KVNY_V9_ADJU\KVNY_v9.SFC"
ME PROFFILE  "C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC -
Shadowbox Studio, Santa Clarita\KVNY_V9_ADJU\KVNY_v9.PFL"
** PROFFILE  "C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC -
Shadowbox Studio, Santa Clarita\KVNY_V9_ADJU\KVNY_v9.PFL"
ME SURFDATA  23130 2012
ME UAIRDATA  3190 2012
ME PROFBASE  235  METERS
ME FINISHED

OU STARTING
OU RECTABLE  24  FIRST
OU FILEFORM  FIX
OU PLOTFILE  24  ALL  FIRST  ALL`24`FIRST.plt  10000
OU PLOTFILE  ANNUAL  ALL  ALL`ANNUAL.plt  10001
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            4 Warning Message(s)
 A Total of            0 Informational Message(s)

```

```
327
328       ******** FATAL ERROR MESSAGES ********
329                  ***  NONE  ***
330
331
332       ********   WARNING MESSAGES   ********
333     ME W186     309       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
        used           0.50
334     ME W187     309       MEOPEN: ADJ_U* Option for Stable Low Winds used in
        AERMET
335     OU W565     314       OUPLOT: Possible Conflict With Dynamically Allocated FUNIT
        PLOTFILE
336     OU W565     315       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
        PLOTFILE
337
338     ***********************************
339     *** SETUP Finishes Successfully ***
340     ***********************************
341
342     FE *** AERMOD - VERSION 22112  ***   ***  DPM
        Concenrations                                                  ***        05/22/23
343     *** AERMET - VERSION  16216 ***
        ***                                                           ***
        13:36:38
344
                                   PAGE   1
345     *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
346
347                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
348     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
349
350     ** Model Options Selected:
351          * Model Uses Regulatory DEFAULT Options
352          * Model Is Setup For Calculation of Average CONCentration Values.
353          * NO GAS DEPOSITION Data Provided.
354          * NO PARTICLE DEPOSITION Data Provided.
355          * Model Uses NO DRY DEPLETION. DDPLETE  =  F
356          * Model Uses NO WET DEPLETION. WETDPLT  =  F
357          * Stack-tip Downwash.
358          * Model Accounts for ELEVated Terrain Effects.
359          * Use Calms Processing Routine.
360          * Use Missing Data Processing Routine.
361          * No Exponential Decay.
362          * Model Uses RURAL Dispersion Only.
363          * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
364          * CCVR_Sub - Meteorological data includes CCVR substitutions
365          * TEMP_Sub - Meteorological data includes TEMP substitutions
366          * Model Assumes No FLAGPOLE Receptor Heights.
367          * The User Specified a Pollutant Type of: DPM
368
369     **Model Calculates  1 Short Term Average(s) of:  24-HR
370         and Calculates ANNUAL Averages
371
372     **This Run Includes:      1 Source(s);       1 Source Group(s); and     138 Receptor(s)
373
374                    with:      0 POINT(s), including
375                               0 POINTCAP(s) and      0 POINTHOR(s)
376                     and:      1 VOLUME source(s)
377                     and:      0 AREA type source(s)
378                     and:      0 LINE source(s)
379                     and:      0 RLINE/RLINEXT source(s)
380                     and:      0 OPENPIT source(s)
381                     and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
382                     and:      0 SWPOINT source(s)
383
```

```
384
385   **Model Set To Continue RUNning After the Setup Testing.
386
387   **The AERMET Input Meteorological Data Version Date:  16216
388
389   **Output Options Selected:
390            Model Outputs Tables of ANNUAL Averages by Receptor
391            Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
               Keyword)
392            Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
393
394   **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
395                                                                   m for Missing Hours
396                                                                   b for Both Calm and
                                                                      Missing Hours
397
398   **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   235.00 ;  Decay Coef.
      =    0.000     ;  Rot. Angle =     0.0
399                    Emission Units = GRAMS/SEC                              ;  Emission
                       Rate Unit Factor =   0.10000E+07
400                    Output Units   = MICROGRAMS/M**3
401
402   **Approximate Storage Requirements of Model =      3.5 MB of RAM.
403
404   **Input Runstream File:
      aermod.inp

405   **Output Print File:
      aermod.out

406
407   FF *** AERMOD - VERSION 22112  ***   ***  DPM
      Concenrations                                                  ***        05/22/23
408    *** AERMET - VERSION  16216 ***
       ***                                                          ***
       13:36:38
409
                                  PAGE   2
410    *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
411
412
413                                              *** VOLUME SOURCE DATA ***
414
415                 NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
                    INIT.   URBAN  EMISSION RATE
416      SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
         SZ     SOURCE  SCALAR VARY
417        ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
           (METERS)             BY
418    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - -
419
420    N94XI000         0   0.59293E-03  359310.2 3806191.2   373.2     4.33     3.16
       3.16     NO
421   FF *** AERMOD - VERSION 22112  ***   ***  DPM
      Concenrations                                                  ***        05/22/23
422    *** AERMET - VERSION  16216 ***
       ***                                                          ***
       13:36:38
423
                                  PAGE   3
424    *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
425
426
427                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
428
```

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(358674.3, 3807012.0, 396.6, 399.0, 0.0); (358724.3, 3807012.0, 392.5, 406.0, 0.0);
(358774.3, 3807012.0, 381.6, 406.0, 0.0); (358824.3, 3807012.0, 393.9, 406.0, 0.0);
(358874.3, 3807012.0, 381.0, 406.0, 0.0); (358924.3, 3807012.0, 388.6, 406.0, 0.0);
(358974.3, 3807012.0, 376.1, 411.0, 0.0); (358624.3, 3807062.0, 390.6, 399.0, 0.0);
(358674.3, 3807062.0, 389.8, 399.0, 0.0); (358724.3, 3807062.0, 384.8, 406.0, 0.0);
(358774.3, 3807062.0, 379.2, 406.0, 0.0); (358824.3, 3807062.0, 391.4, 406.0, 0.0);
(358874.3, 3807062.0, 375.7, 406.0, 0.0); (358924.3, 3807062.0, 380.9, 406.0, 0.0);
(358974.3, 3807062.0, 382.4, 406.0, 0.0); (359024.3, 3807062.0, 370.6, 421.0, 0.0);
(358724.3, 3807112.0, 373.1, 406.0, 0.0); (358774.3, 3807112.0, 381.4, 406.0, 0.0);
(358824.3, 3807112.0, 384.5, 406.0, 0.0); (358874.3, 3807112.0, 373.9, 406.0, 0.0);
(358924.3, 3807112.0, 372.0, 406.0, 0.0); (358974.3, 3807112.0, 375.8, 406.0, 0.0);
(359024.3, 3807112.0, 366.8, 421.0, 0.0); (358774.3, 3807162.0, 375.4, 406.0, 0.0);
(358824.3, 3807162.0, 375.4, 406.0, 0.0); (358874.3, 3807162.0, 367.2, 406.0, 0.0);
(358924.3, 3807162.0, 369.4, 406.0, 0.0); (358974.3, 3807162.0, 367.0, 421.0, 0.0);
(359024.3, 3807162.0, 364.0, 421.0, 0.0); (358824.3, 3807212.0, 365.7, 406.0, 0.0);
(358874.3, 3807212.0, 364.0, 406.0, 0.0); (358924.3, 3807212.0, 364.8, 421.0, 0.0);
(358974.3, 3807212.0, 364.2, 421.0, 0.0); (358874.3, 3807262.0, 364.0, 406.0, 0.0);
(358924.3, 3807262.0, 364.0, 421.0, 0.0); (358974.3, 3807262.0, 364.5, 421.0, 0.0);
(358924.3, 3807312.0, 364.0, 421.0, 0.0); (358924.3, 3807362.0, 371.1, 383.0, 0.0);
(359670.2, 3805999.7, 383.6, 383.6, 0.0); (359720.2, 3805999.7, 384.0, 384.0, 0.0);
(359770.2, 3805999.7, 385.0, 385.0, 0.0); (359820.2, 3805999.7, 385.6, 385.6, 0.0);
(359870.2, 3805999.7, 386.0, 386.0, 0.0); (359620.2, 3806049.7, 383.0, 383.0, 0.0);
(359670.2, 3806049.7, 383.0, 383.0, 0.0); (359720.2, 3806049.7, 384.0, 384.0, 0.0);
(359770.2, 3806049.7, 384.3, 384.3, 0.0); (359820.2, 3806049.7, 385.0, 385.0, 0.0);

```
467       ( 359870.2, 3806049.7,     385.5,     385.5,       0.0);         ( 359570.2,
          3806099.7,     381.7,     381.7,       0.0);
468       ( 359620.2, 3806099.7,     382.0,     382.0,       0.0);         ( 359670.2,
          3806099.7,     382.9,     382.9,       0.0);
469       ( 359720.2, 3806099.7,     383.2,     383.2,       0.0);         ( 359770.2,
          3806099.7,     384.0,     384.0,       0.0);
470       ( 359820.2, 3806099.7,     384.4,     384.4,       0.0);         ( 359870.2,
          3806099.7,     385.2,     385.2,       0.0);
471       ( 359920.2, 3806099.7,     386.0,     386.0,       0.0);         ( 359520.2,
          3806149.7,     380.7,     380.7,       0.0);
472       ( 359570.2, 3806149.7,     381.3,     381.3,       0.0);         ( 359620.2,
          3806149.7,     382.0,     382.0,       0.0);
473       ( 359670.2, 3806149.7,     382.6,     382.6,       0.0);         ( 359720.2,
          3806149.7,     383.0,     383.0,       0.0);
474       ( 359770.2, 3806149.7,     383.9,     383.9,       0.0);         ( 359820.2,
          3806149.7,     384.0,     384.0,       0.0);
475       ( 359870.2, 3806149.7,     384.9,     384.9,       0.0);         ( 359920.2,
          3806149.7,     385.9,     385.9,       0.0);
476       ( 359520.2, 3806199.7,     380.2,     380.2,       0.0);         ( 359570.2,
          3806199.7,     381.0,     381.0,       0.0);
477       ( 359620.2, 3806199.7,     381.3,     381.3,       0.0);         ( 359670.2,
          3806199.7,     382.0,     382.0,       0.0);
478       ( 359720.2, 3806199.7,     383.0,     383.0,       0.0);         ( 359770.2,
          3806199.7,     383.1,     383.1,       0.0);
479       ( 359470.2, 3806249.7,     379.0,     379.0,       0.0);         ( 359520.2,
          3806249.7,     379.9,     379.9,       0.0);
480       ( 359570.2, 3806249.7,     380.7,     380.7,       0.0);         ( 359620.2,
          3806249.7,     381.0,     381.0,       0.0);
481       ( 359670.2, 3806249.7,     381.9,     381.9,       0.0);         ( 359720.2,
          3806249.7,     382.4,     382.4,       0.0);
482       ( 359420.2, 3806299.7,     378.4,     378.4,       0.0);         ( 359470.2,
          3806299.7,     379.0,     379.0,       0.0);
483       ( 359520.2, 3806299.7,     379.7,     379.7,       0.0);         ( 359570.2,
          3806299.7,     380.3,     380.3,       0.0);
484       ( 359620.2, 3806299.7,     381.0,     381.0,       0.0);         ( 359670.2,
          3806299.7,     381.6,     381.6,       0.0);
485       ( 359720.2, 3806299.7,     382.0,     382.0,       0.0);         ( 359420.2,
          3806349.7,     378.1,     378.1,       0.0);
486       ( 359470.2, 3806349.7,     379.0,     379.0,       0.0);         ( 359520.2,
          3806349.7,     379.7,     379.7,       0.0);
487       ( 359570.2, 3806349.7,     380.0,     380.0,       0.0);         ( 359620.2,
          3806349.7,     381.0,     381.0,       0.0);
488   FF *** AERMOD - VERSION 22112  ***   ***  DPM
      Concenrations                                                  ***        05/22/23
489    *** AERMET - VERSION  16216 ***
       ***                                                                    ***
       13:36:38
490
                                    PAGE   5
491    *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
492
493                                                *** DISCRETE CARTESIAN RECEPTORS ***
494                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
495                                                          (METERS)
496
497       ( 359670.2, 3806349.7,     381.0,     437.0,       0.0);         ( 359720.2,
          3806349.7,     382.0,     437.0,       0.0);
498       ( 359370.2, 3806399.7,     377.7,     377.7,       0.0);         ( 359420.2,
          3806399.7,     378.0,     378.0,       0.0);
499       ( 359470.2, 3806399.7,     379.0,     379.0,       0.0);         ( 359520.2,
          3806399.7,     379.0,     379.0,       0.0);
500       ( 359570.2, 3806399.7,     380.0,     435.0,       0.0);         ( 359620.2,
          3806399.7,     380.1,     437.0,       0.0);
501       ( 359670.2, 3806399.7,     381.0,     438.0,       0.0);         ( 359720.2,
          3806399.7,     381.4,     438.0,       0.0);
502       ( 359770.2, 3806399.7,     382.6,     442.0,       0.0);         ( 359370.2,
```

```
      3806449.7,     377.0,     405.0,       0.0);
503   (  359420.2, 3806449.7,     378.0,     378.0,       0.0);         (  359470.2,
      3806449.7,     378.9,     434.0,       0.0);
504   (  359520.2, 3806449.7,     379.0,     435.0,       0.0);         (  358460.6,
      3805608.3,     381.0,     381.0,       0.0);
505   (  358560.6, 3805608.3,     380.9,     380.9,       0.0);         (  358660.6,
      3805608.3,     376.9,     376.9,       0.0);
506   (  358360.6, 3805708.3,     378.1,     378.1,       0.0);         (  358460.6,
      3805708.3,     379.2,     379.2,       0.0);
507   (  358560.6, 3805708.3,     375.2,     375.2,       0.0);         (  358660.6,
      3805708.3,     375.6,     375.6,       0.0);
508   (  358760.6, 3805708.3,     376.0,     376.0,       0.0);         (  358360.6,
      3805808.3,     378.1,     378.1,       0.0);
509   (  358460.6, 3805808.3,     375.8,     382.0,       0.0);         (  358560.6,
      3805808.3,     374.2,     374.2,       0.0);
510   (  358660.6, 3805808.3,     375.0,     375.0,       0.0);         (  358760.6,
      3805808.3,     376.0,     376.0,       0.0);
511   (  358360.6, 3805908.3,     374.9,     374.9,       0.0);         (  358460.6,
      3805908.3,     373.0,     373.0,       0.0);
512   (  358560.6, 3805908.3,     373.7,     373.7,       0.0);         (  358660.6,
      3805908.3,     374.9,     374.9,       0.0);
513   (  358360.6, 3806008.3,     372.6,     372.6,       0.0);         (  358460.6,
      3806008.3,     372.0,     372.0,       0.0);
514   (  358560.6, 3806008.3,     372.9,     372.9,       0.0);         (  358260.6,
      3806108.3,     372.3,     372.3,       0.0);
515   (  358360.6, 3806108.3,     372.0,     372.0,       0.0);         (  358460.6,
      3806108.3,     371.0,     371.0,       0.0);
516   (  358560.6, 3806108.3,     372.0,     372.0,       0.0);         (  358160.6,
      3806208.3,     371.0,     371.0,       0.0);
517   (  358260.6, 3806208.3,     371.0,     371.0,       0.0);         (  358360.6,
      3806208.3,     371.0,     371.0,       0.0);
518   (  358460.6, 3806208.3,     370.0,     370.0,       0.0);         (  358160.6,
      3806308.3,     371.0,     371.0,       0.0);
519   (  358260.6, 3806308.3,     370.6,     370.6,       0.0);         (  358360.6,
      3806308.3,     370.0,     370.0,       0.0);
520   (  358260.6, 3806408.3,     370.0,     370.0,       0.0);         (  358360.6,
      3806408.3,     369.3,     369.3,       0.0);
521   FF *** AERMOD - VERSION 22112  ***   ***  DPM
      Concenrations                                                    ***        05/22/23
522    *** AERMET - VERSION  16216 ***
       ***                                                              ***
       13:36:38
523
                                  PAGE   6
524    *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
525
526                                              *** METEOROLOGICAL DAYS SELECTED FOR
                                                 PROCESSING ***
527                                                          (1=YES; 0=NO)
528
529              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
530              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
531              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
532              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
533              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
534              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
535              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
536              1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
537
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC - Shadowbox Stud Met Version: 16216
Profile file: C:\Users\jclar\OneDrive\Clark and Associates\Project 218 - ABJC - Shadowbox Stud
Surface format:
FREE

Profile format:
FREE

Surface station no.: 23130 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
12	01	01	1	01	-10.8	0.139	-9.000	-9.000	-999.	124.	21.9	0.11	2.64	1.00	1.59	293.	7.9	285.9	2.0
12	01	01	1	02	-4.5	0.089	-9.000	-9.000	-999.	64.	13.7	0.11	2.64	1.00	1.04	249.	7.9	284.2	2.0
12	01	01	1	03	-5.2	0.095	-9.000	-9.000	-999.	70.	14.5	0.11	2.64	1.00	1.11	239.	7.9	282.0	2.0
12	01	01	1	04	-6.4	0.105	-9.000	-9.000	-999.	82.	16.1	0.11	2.64	1.00	1.23	254.	7.9	283.1	2.0
12	01	01	1	05	-3.2	0.076	-9.000	-9.000	-999.	50.	12.0	0.11	2.64	1.00	0.86	267.	7.9	283.1	2.0
12	01	01	1	06	-2.6	0.070	-9.000	-9.000	-999.	44.	11.6	0.11	2.64	1.00	0.75	311.	7.9	282.5	2.0
12	01	01	1	07	-4.6	0.089	-9.000	-9.000	-999.	64.	13.6	0.11	2.64	1.00	1.04	293.	7.9	283.8	2.0
12	01	01	1	08	-2.7	0.073	-9.000	-9.000	-999.	47.	12.5	0.11	2.64	0.56	0.84	259.	7.9	282.5	2.0
12	01	01	1	09	34.4	0.139	0.330	0.009	37.	124.	-6.9	0.11	2.64	0.32	1.09	253.	7.9	288.8	2.0
12	01	01	1	10	117.4	0.405	0.751	0.005	128.	618.	-50.0	0.11	2.64	0.24	3.91	339.	7.9	295.4	2.0
12	01	01	1	11	167.5	0.576	1.211	0.005	376.	1050.	-101.3	0.11	2.64	0.21	5.79	353.	7.9	297.0	2.0
12	01	01	1	12	192.7	0.638	1.547	0.005	681.	1220.	-119.0	0.11	2.64	0.20	6.45	354.	7.9	298.1	2.0

```
576    12 01 01   1 13  192.6  0.554  1.851  0.005 1167.  999.    -78.2  0.11   2.64   0.20
       5.50  354.    7.9  299.2    2.0
577    12 01 01   1 14  166.1  0.611  1.897  0.005 1456. 1146.   -121.6  0.11   2.64   0.21
       6.19  356.    7.9  299.2    2.0
578    12 01 01   1 15  114.3  0.610  1.719  0.005 1573. 1145.   -175.8  0.11   2.64   0.25
       6.26  354.    7.9  298.1    2.0
579    12 01 01   1 16   42.7  0.619  1.249  0.005 1611. 1167.   -489.4  0.11   2.64   0.33
       6.48  354.    7.9  297.0    2.0
580    12 01 01   1 17  -46.6  0.603 -9.000 -9.000 -999. 1125.    416.0  0.11   2.64   0.59
       6.41  359.    7.9  294.9    2.0
581    12 01 01   1 18  -55.7  0.590 -9.000 -9.000 -999. 1090.    383.5  0.11   2.64   1.00
       6.30    3.    7.9  294.2    2.0
582    12 01 01   1 19  -35.3  0.375 -9.000 -9.000 -999.  595.    154.3  0.11   2.64   1.00
       4.07  344.    7.9  294.2    2.0
583    12 01 01   1 20   -3.2  0.076 -9.000 -9.000 -999.  269.     12.1  0.11   2.64   1.00
       0.86  278.    7.9  289.9    2.0
584    12 01 01   1 21   -7.9  0.118 -9.000 -9.000 -999.  105.     18.5  0.11   2.64   1.00
       1.37  294.    7.9  290.9    2.0
585    12 01 01   1 22  -19.6  0.204 -9.000 -9.000 -999.  220.     45.6  0.11   2.64   1.00
       2.27  307.    7.9  288.8    2.0
586    12 01 01   1 23  -10.3  0.135 -9.000 -9.000 -999.  121.     21.3  0.11   2.64   1.00
       1.55  308.    7.9  287.5    2.0
587    12 01 01   1 24  -11.3  0.142 -9.000 -9.000 -999.  128.     22.4  0.11   2.64   1.00
       1.62  290.    7.9  287.5    2.0
588
589
590    First hour of profile data
591    YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
592    12 01 01 01    7.9 1  293.    1.59   286.0   99.0  -99.00  -99.00
593
594    F indicates top of profile (=1) or below (=0)
595 FF *** AERMOD - VERSION 22112  ***   ***  DPM
       Concenrations                                                ***        05/22/23
596    *** AERMET - VERSION  16216 ***
       ***                                                                     ***
       13:36:38
597
                                  PAGE   8
598    *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
599
600                      *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
                         YEARS FOR SOURCE GROUP: ALL      ***
601                                 INCLUDING SOURCE(S):     N94XI000    ,
602
603                                              *** DISCRETE CARTESIAN RECEPTOR POINTS ***
604
605                                           ** CONC OF DPM      IN
                                              MICROGRAMS/M**3                          **
606
607          X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)   Y-COORD
             (M)        CONC
608    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - -
609            358674.30    3807012.00        0.00098                      358724.30
               3807012.00        0.00110
610            358774.30    3807012.00        0.00139                      358824.30
               3807012.00        0.00102
611            358874.30    3807012.00        0.00138                      358924.30
               3807012.00        0.00117
612            358974.30    3807012.00        0.00152                      358624.30
               3807062.00        0.00108
613            358674.30    3807062.00        0.00110                      358724.30
               3807062.00        0.00121
614            358774.30    3807062.00        0.00129                      358824.30
               3807062.00        0.00102
615            358874.30    3807062.00        0.00138                      358924.30
```

	3807062.00	0.00124		
616	358974.30	3807062.00	0.00121	359024.30
	3807062.00	0.00137		
617	358724.30	3807112.00	0.00125	358774.30
	3807112.00	0.00115		
618	358824.30	3807112.00	0.00109	358874.30
	3807112.00	0.00125		
619	358924.30	3807112.00	0.00125	358974.30
	3807112.00	0.00126		
620	359024.30	3807112.00	0.00123	358774.30
	3807162.00	0.00114		
621	358824.30	3807162.00	0.00114	358874.30
	3807162.00	0.00112		
622	358924.30	3807162.00	0.00114	358974.30
	3807162.00	0.00112		
623	359024.30	3807162.00	0.00110	358824.30
	3807212.00	0.00102		
624	358874.30	3807212.00	0.00101	358924.30
	3807212.00	0.00102		
625	358974.30	3807212.00	0.00102	358874.30
	3807262.00	0.00094		
626	358924.30	3807262.00	0.00094	358974.30
	3807262.00	0.00094		
627	358924.30	3807312.00	0.00087	358924.30
	3807362.00	0.00083		
628	359670.20	3805999.70	0.00851	359720.20
	3805999.70	0.00732		
629	359770.20	3805999.70	0.00619	359820.20
	3805999.70	0.00534		
630	359870.20	3805999.70	0.00469	359620.20
	3806049.70	0.01133		
631	359670.20	3806049.70	0.00956	359720.20
	3806049.70	0.00780		
632	359770.20	3806049.70	0.00664	359820.20
	3806049.70	0.00561		
633	359870.20	3806049.70	0.00482	359570.20
	3806099.70	0.01613		
634	359620.20	3806099.70	0.01264	359670.20
	3806099.70	0.00992		
635	359720.20	3806099.70	0.00813	359770.20
	3806099.70	0.00667		
636	359820.20	3806099.70	0.00565	359870.20
	3806099.70	0.00478		
637	359920.20	3806099.70	0.00410	359520.20
	3806149.70	0.02295		
638	359570.20	3806149.70	0.01642	359620.20
	3806149.70	0.01234		
639	359670.20	3806149.70	0.00965	359720.20
	3806149.70	0.00786		
640	359770.20	3806149.70	0.00641	359820.20
	3806149.70	0.00549		
641	359870.20	3806149.70	0.00463	359920.20
	3806149.70	0.00395		
642	359520.20	3806199.70	0.02025	359570.20
	3806199.70	0.01459		
643	359620.20	3806199.70	0.01132	359670.20
	3806199.70	0.00892		
644	359720.20	3806199.70	0.00716	359770.20
	3806199.70	0.00608		
645	359470.20	3806249.70	0.01827	359520.20
	3806249.70	0.01384		
646	359570.20	3806249.70	0.01083	359620.20
	3806249.70	0.00888		
647	359670.20	3806249.70	0.00727	359720.20
	3806249.70	0.00613		
648	359420.20	3806299.70	0.01569	359470.20

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): N94XI000 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
359520.20	3806299.70	0.00939	359570.20	3806299.70	0.00772
359620.20	3806299.70	0.00650	359670.20	3806299.70	0.00557
359720.20	3806299.70	0.00488	359420.20	3806349.70	0.01256
359470.20	3806349.70	0.00876	359520.20	3806349.70	0.00709
359570.20	3806349.70	0.00600	359620.20	3806349.70	0.00501
359670.20	3806349.70	0.00442	359720.20	3806349.70	0.00383
359370.20	3806399.70	0.01067	359420.20	3806399.70	0.00902
359470.20	3806399.70	0.00676	359520.20	3806399.70	0.00580
359570.20	3806399.70	0.00482	359620.20	3806399.70	0.00426
359670.20	3806399.70	0.00366	359720.20	3806399.70	0.00324
359770.20	3806399.70	0.00282	359370.20	3806449.70	0.00790
359420.20	3806449.70	0.00680	359470.20	3806449.70	0.00529
359520.20	3806449.70	0.00473	358460.60	3805608.30	0.00046
358560.60	3805608.30	0.00052	358660.60	3805608.30	0.00076
358360.60	3805708.30	0.00057	358460.60	3805708.30	0.00053
358560.60	3805708.30	0.00076	358660.60	3805708.30	0.00088
358760.60	3805708.30	0.00102	358360.60	3805808.30	0.00063
358460.60	3805808.30	0.00072	358560.60	3805808.30	0.00085
358660.60	3805808.30	0.00100	358760.60	3805808.30	0.00120
358360.60	3805908.30	0.00071	358460.60	3805908.30	0.00082
358560.60	3805908.30	0.00096	358660.60	3805908.30	0.00115
358360.60	3806008.30	0.00086	358460.60		

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): N94XI000 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
358674.30	3807012.00	0.00924	(12042324)	358724.30	3807012.00	0.01058	(12041224)
358774.30	3807012.00	0.01248	(12041224)	358824.30	3807012.00	0.00832	(12051024)
358874.30	3807012.00	0.01216	(12112924)	358924.30	3807012.00	0.01283	(12112924)
358974.30	3807012.00	0.01073	(12112924)	358624.30	3807062.00	0.01006	(12042324)
358674.30	3807062.00	0.01098	(12041224)	358724.30	3807062.00	0.01203	(12041224)
358774.30	3807062.00	0.00995	(12041224)	358824.30	3807062.00	0.00886	(12112924)
358874.30	3807062.00	0.01005	(12112924)	358924.30	3807062.00	0.01191	(12070624)
358974.30	3807062.00	0.01242	(12070624)	359024.30	3807062.00	0.00958	(14052524)
358724.30	3807112.00	0.00735	(12110124)	358774.30	3807112.00	0.00864	(12112924)
358824.30	3807112.00	0.01022	(12112924)	358874.30	3807112.00	0.00934	(12112924)
358924.30	3807112.00	0.00905	(12112924)	358974.30	3807112.00	0.00861	(12070624)
359024.30	3807112.00	0.00889c	(13020524)	358774.30	3807162.00	0.00790	(12112924)
358824.30	3807162.00	0.00848	(12112924)	358874.30	3807162.00	0.00840	(12112924)
358924.30	3807162.00	0.00800	(12070624)	358974.30	3807162.00	0.00774	(14052524)
359024.30	3807162.00	0.00848c	(13020524)	358824.30			

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          3807212.00        0.00775  (12112924)
721       358874.30   3807212.00        0.00751  (12112924)                358924.30
          3807212.00        0.00718  (12070624)
722       358974.30   3807212.00        0.00724  (14052524)                358874.30
          3807262.00        0.00678  (12112924)
723       358924.30   3807262.00        0.00651  (12070624)                358974.30
          3807262.00        0.00690  (14052524)
724       358924.30   3807312.00        0.00614  (14052524)                358924.30
          3807362.00        0.00616  (14052524)
725       359670.20   3805999.70        0.06367  (16022024)                359720.20
          3805999.70        0.05448  (13120624)
726       359770.20   3805999.70        0.04900  (13120624)                359820.20
          3805999.70        0.04698  (13120524)
727       359870.20   3805999.70        0.04749  (13120524)                359620.20
          3806049.70        0.08153  (13120624)
728       359670.20   3806049.70        0.07699  (13120524)                359720.20
          3806049.70        0.07565  (13120524)
729       359770.20   3806049.70        0.07230  (13120524)                359820.20
          3806049.70        0.06559  (13120524)
730       359870.20   3806049.70        0.05888  (13120524)                359570.20
          3806099.70        0.14372  (13120524)
731       359620.20   3806099.70        0.13077  (13120524)                359670.20
          3806099.70        0.11089  (13120524)
732       359720.20   3806099.70        0.09400  (13120524)                359770.20
          3806099.70        0.07838  (13120524)
733       359820.20   3806099.70        0.06636  (13120524)                359870.20
          3806099.70        0.05589  (13120524)
734       359920.20   3806099.70        0.04746  (13120524)                359520.20
          3806149.70        0.22241  (13120524)
735       359570.20   3806149.70        0.15993  (13120524)                359620.20
          3806149.70        0.11841  (13120524)
736       359670.20   3806149.70        0.09036  (13120524)                359720.20
          3806149.70        0.07133  (13120524)
737       359770.20   3806149.70        0.05660  (13120524)                359820.20
          3806149.70        0.04797  (16032124)
738       359870.20   3806149.70        0.04103  (16032124)                359920.20
          3806149.70        0.03528  (16032124)
739       359520.20   3806199.70        0.15140  (16032124)                359570.20
          3806199.70        0.11261  (16032124)
740       359620.20   3806199.70        0.08909  (16032124)                359670.20
          3806199.70        0.07133  (16032124)
741       359720.20   3806199.70        0.05782  (16032124)                359770.20
          3806199.70        0.04940  (16032124)
742       359470.20   3806249.70        0.12771m (15020724)                359520.20
          3806249.70        0.11087  (12022824)
743       359570.20   3806249.70        0.09322  (12022824)                359620.20
          3806249.70        0.07770  (12022824)
744       359670.20   3806249.70        0.06381  (12022824)                359720.20
          3806249.70        0.05328  (12022824)
745       359420.20   3806299.70        0.14627  (13081524)                359470.20
          3806299.70        0.11723  (13072124)
746  FF *** AERMOD - VERSION 22112  ***   ***  DPM
     Concenrations                                                  ***        05/22/23
747   *** AERMET - VERSION  16216 ***
      ***                                                                     ***
      13:36:38
748
                                PAGE  11
749   *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
750
751                               *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
752                                   INCLUDING SOURCE(S):     N94XI000    ,
753
754                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***
755
```

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
359520.20	3806299.70	0.08067	(12031424)	359570.20	3806299.70	0.06545	(12121324)
359620.20	3806299.70	0.04969	(12121324)	359670.20	3806299.70	0.04815	(12022824)
359720.20	3806299.70	0.04564	(12022824)	359420.20	3806349.70	0.09079	(14020724)
359470.20	3806349.70	0.09479	(13081524)	359520.20	3806349.70	0.07620	(13072124)
359570.20	3806349.70	0.06232	(13072124)	359620.20	3806349.70	0.04909	(12031424)
359670.20	3806349.70	0.04337	(12121324)	359720.20	3806349.70	0.03735	(12121324)
359370.20	3806399.70	0.06508	(12061524)	359420.20	3806399.70	0.06883	(14032124)
359470.20	3806399.70	0.07322	(14020724)	359520.20	3806399.70	0.06777	(13081524)
359570.20	3806399.70	0.05311	(13030624)	359620.20	3806399.70	0.05253	(13072124)
359670.20	3806399.70	0.03810	(12031424)	359720.20	3806399.70	0.03438	(13120224)
359770.20	3806399.70	0.03134	(12121324)	359370.20	3806449.70	0.04999	(12061524)
359420.20	3806449.70	0.05463	(14032124)	359470.20	3806449.70	0.04899	(12110824)
359520.20	3806449.70	0.05332	(14020724)	358460.60	3805608.30	0.00898	(13020624)
358560.60	3805608.30	0.00813	(12092124)	358660.60	3805608.30	0.00746c	(14102324)
358360.60	3805708.30	0.00967	(14030224)	358460.60	3805708.30	0.01142	(14030224)
358560.60	3805708.30	0.00985	(14030224)	358660.60	3805708.30	0.00927	(14030224)
358760.60	3805708.30	0.00970c	(14102324)	358360.60	3805808.30	0.01193	(14030224)
358460.60	3805808.30	0.01325	(14030224)	358560.60	3805808.30	0.01427	(14030224)
358660.60	3805808.30	0.01469	(14030224)	358760.60	3805808.30	0.01415	(14030224)
358360.60	3805908.30	0.01247	(14030224)	358460.60	3805908.30	0.01507	(14030224)
358560.60	3805908.30	0.01802	(14030224)	358660.60	3805908.30	0.02104	(14030224)
358360.60	3806008.30	0.01004	(14030224)	358460.60	3806008.30	0.01287	(14030224)
358560.60	3806008.30	0.01689	(14030224)	358260.60	3806108.30	0.00873	(14012324)
358360.60	3806108.30	0.00993	(14012324)	358460.60	3806108.30	0.01135	(14012324)
358560.60	3806108.30	0.01320	(14012324)	358160.60	3806208.30	0.00674c	(13071324)
358260.60	3806208.30	0.00772c	(13071324)	358360.60	3806208.30	0.00898c	(13071324)
358460.60	3806208.30	0.01056c	(13071324)	358160.60	3806308.30	0.00871	(16121124)
358260.60	3806308.30	0.01040	(16121124)	358360.60	3806308.30	0.01257	(16121124)
358260.60	3806408.30	0.01174	(16121124)	358360.60	3806408.30	0.01331	(16121124)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID	NETWORK AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.02295 AT (359520.20, 3806149.70, 380.72, 380.72, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.02025 AT (359520.20, 3806199.70, 380.17, 380.17, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.01827 AT (359470.20, 3806249.70, 379.03, 379.03, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.01642 AT (359570.20, 3806149.70, 381.34, 381.34, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.01613 AT (359570.20, 3806099.70, 381.73, 381.73, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.01569 AT (359420.20, 3806299.70, 378.38, 378.38, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.01459 AT (359570.20, 3806199.70, 381.00, 381.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.01384 AT (359520.20, 3806249.70, 379.88, 379.88, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.01264 AT (359620.20, 3806099.70, 382.03, 382.03, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.01256 AT (359420.20, 3806349.70, 378.09, 378.09, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

DATE

```
                                                                    NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.22241  ON 13120524: AT (  359520.20,
3806149.70,   380.72,   380.72,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 22112  ***   ***  DPM
Concenrations                                                  ***        05/22/23
 *** AERMET - VERSION  16216 ***
 ***                                                           ***
 13:36:38

                              PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            4 Warning Message(s)
 A Total of          839 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          604 Calm Hours Identified

 A Total of          235 Missing Hours Identified (  0.54 Percent)


    ******** FATAL ERROR MESSAGES ********
                ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     309       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     309       MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET
 OU W565     314       OUPLOT: Possible Conflict With Dynamically Allocated FUNIT
 PLOTFILE
 OU W565     315       PERPLT: Possible Conflict With Dynamically Allocated FUNIT
 PLOTFILE

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
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*HARP - HF Santa Clarita\residential risk to the northHRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBRE\	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RISK
	1		9901	DieselExhP	0.023	1.99E-05	30YrCancer	*	1.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00

INDEX	GRP1	GRP2	POLID	POLABBRE\	CONC	RISK_SUM	SCENARIO	DETAILS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK
	1		9901	DieselExhP	0.023	1.99E-05	30YrCancer	*	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

INDEX	GRP1	GRP2	POLID	POLABBRE\	CONC	RISK_SUM	SCENARIO	DETAILS	CHICKEN_F	EGG_RISK	1ST_DRIVER
	1		9901	DieselExhP	0.023	1.99E-05	30YrCancer	*	0.00E+00	0.00E+00	INHALATION

INDEX	GRP1	GRP2	POLID	POLABBRE\	CONC	RISK_SUM	SCENARIO	DETAILS	PASTURE_(	FISH_CONC	WATER_CC	2ND_DRIVER
	1		9901	DieselExhP	0.023	1.99E-05	30YrCancer	*	0.00E+00	0.00E+00	0.00E+00	

EXHIBIT B

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #23-002

May 19, 2023

Mr. Richard M. Franco
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: City of Santa Clarita Shadowbox Studio Project
Santa Clarita, California
Review and Comment on DEIR

Dear Mr. Franco,

Per your request, Wilson Ihrig has reviewed the information and noise impact analysis in the following documents:

City of Santa Clarita Shadowbox Studio Project
Draft Environmental Impact Report ("DEIR")
April 2023

Blackhall Studios-Santa Clarita Project
Noise and Vibration Study ("Technical Report" or "TR")
Prepared by Rincon Consultants, Inc.
July 2022

O6-35

The Proposed Project (Project) consists of developing a full-service film and television campus on a vacant 93.5-acre site and would consist of 19 sound stages, a large support building, parking structure, a catering building, and mechanical building south of Placerita Creek. The project site is located in the City of Santa Clarita, bounded by 12th Street, Arch Street, and 13th Street on the south; a railroad right-of-way (ROW) and Railroad Avenue on the west; Metropolitan Water District ROW on the east; and slopes maintained by the adjacent residential uses to the north.

This letter reports our comments on the noise analysis in the subject document. Wilson Ihrig, Acoustical Consultants, has practiced exclusively in the field of acoustics since 1966. During our 57 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CADNA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise[1]

Although the health effects of noise are not taken as seriously in the United States as they are in other countries, they are real and, in many parts of the country, pervasive.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

O6-36

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and it makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

[1] More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (https://www.who.int/docstore/peh/noise/Comnoise-1.pdf)

Potentially Significant Construction Noise Impacts Have Not Been Mitigated

The DEIR states that "because noise levels resulting from construction activities would be temporary and would comply with provisions in the City's Noise Ordinance, construction noise impacts resulting from the construction of the Project and off-site improvements would be less than significant" [DEIR page 4.11-15]. Per CEQA Guidelines, "**a project would have significant impact if it would result in generation of a substantial <u>temporary or permanent</u> increase in ambient levels**" [DEIR page 4.11-11]. Further, according to the air quality section, construction activity would take place between April 2023 and September 2025, a period of more than 2 years. The Santa Clarita Municipal code generally considers "temporary" to mean less than one year [Municipal Code Chapter 17.67].

The DEIR construction analysis predicts a 70 dBA Leq noise level[2] from three pieces of equipment at a distance of 200 feet [DEIR page 4.11-15]. The City of Santa Clarita Municipal Code Noise Ordinance limits noise to 65 dBA during daytime hours in residential zones, with corrections based on duration as well as the tonal character of the source [DEIR page 4.11-11]. For example, the code applies a minus 5 dB correction to "a steady whine, screech or hum," which may be produced by a generator or mechanical equipment. Section 11.44.080 of the ordinance limits the hours of construction work within 300 feet of any residentially zoned property, but does not exempt construction work from the noise limits set forth in section 11.44.040. Therefore the construction noise level of 70 dBA would exceed the ordinance limit of 65 dBA. **Predicted 70 dBA construction noise levels <u>do not</u> comply with provisions in the City's Noise Ordinance.** O6-37

Furthermore, the DEIR incorrectly applies an 80 dBA noise threshold for construction noise, based on FTA Transit Noise and Vibration Assessment Criteria, rather than using the City of Santa Clarita Noise Ordinance Limits it cites.

The Project should look at an ambient-based threshold in addition to the 65 dBA City Ordinance criteria in order to evaluate construction noise impacts to determine whether a substantial temporary or permanent increase in ambient levels would occur, per CEQA Guidelines above. As stated in the DEIR, "a 5-dB change is generally recognized as a clearly discernible difference" [DEIR page 4.11-14] and a 10-dB increase is judged by most people as a doubling of the sound level. Measured ambient Leq levels at the residences closest to the project boundary, to the east, were 47-49 dBA and even lower, 42-43 dBA, north of the project [DEIR Figure 4.11-2]. **Predicted 70 dBA construction noise levels are more than 20 dB above these ambient levels.** Measured levels across the railroad track and Railroad Avenue were 70 dBA [DEIR Figure 4.11-2]. However, this short-term measurement does not capture the variable nature of traffic noise along this busy road, nor does the DEIR state if the measurement includes any rail activity. Therefore, it is not possible to determine whether NM5 represents the range of ambient levels at the residences west of the project. **Nevertheless, construction noise at this location would still clearly exceed the City's Noise Ordinance limit of 65 dBA.**

The Noise Technical Report shows a sample calculation for construction noise from a grader, front end loader, and dump truck at 200 feet from a sensitive receptor [TR page 65]. The Air Quality Report in Appendix C of the DEIR shows a complete list of anticipated construction equipment for each phase of work, including unit amounts [Air Quality Report page 127**]. Individually, all of the equipment**

[2] Noise levels are one-hour average (equivalent) levels (Leq) unless otherwise noted. Leq is defined as the steady sound pressure level which, over a given period of time, has the same total energy as the actual fluctuating noise. Thus, the Leq is in fact the RMS sound level with the measure-ment duration used as the averaging time.

on this list, except for the welder, exceeds the City Noise Ordinance 65 dBA criteria at 200 feet. Based on equipment usage factors and reference Lmax levels provided by the FHWA Roadway Construction Noise Model, noise levels from all construction phases range from 64 dBA (architectural coating) to 77 dBA (grading work) at 200 feet as shown in Table 1 below. Grading work at 105 feet (closest distance to sensitive receptors per DEIR page 4.11-15) would be as high as 83 dBA. **All construction phases exceed the City Noise Ordinance and exceed ambient levels by 15 dBA or more.**

Table 1 Predicted Construction Noise Levels at 200 feet

Equipment (Quantity)	FHWA Lmax, dBA	FHWA Usage Factor, %	Construction Leq at 200 feet, dBA	Increase above daytime ambient of 49 dBA (ST-4)
Site Preparation				
rubber tired dozer (3)	85	40%	74	
tractor / loader / backhoe (4)	80	40%	70	
			75	**26**
Grading				
Excavator (2)	85	40%	78	
Grader (1)	85	40%	75	
rubber tired dozer (1)	85	40%	75	
Scraper (2)	85	40%	78	
tractor / loader / backhoe (2)	80	40%	73	
			83	**34**
Building Construction				
Cranes (1)	85	16%	65	
Forklift (3)	85	40%	74	
Generator (1)	82	50%	67	
tractor / loader / backhoe (3)	80	40%	69	
welder (1)	73	40%	57	
			76	**27**
Architectural Coating				
Air compressor (1)	80	40%	64	
			64	15
Paving				
Paver (2)	85	50%	73	
Scarifier (2)	85	20%	69	
Roller (2)	85	20%	69	
			76	**27**

O6-37
Continued

Operational Noise Impact Analysis Incomplete

The Project should look at an ambient-based threshold in addition to the City Ordinance criteria in order to evaluate operational noise impacts, to determine whether a substantial temporary or permanent increase in ambient levels would occur, per CEQA Guidelines above.

The DEIR states that operational noise predictions were generated by SoundPLAN using its source database for parking lot, exhaust, and HVAC sources [DEIR page 4.11-13]. Figure 4.11-3 in the DEIR shows noise contours for operational noise from HVAC and exhaust point sources and parking lot area sources [DEIR page 4.11-16]. Table 4.11-3 shows predicted operational noise levels at sensitive receptors [DEIR page 4.11-17]. **The report does not, however, include the SoundPLAN reference levels used or provide a detailed narrative of operational activities on site, including schedule.**

DEIR Figure 4.11-3 shows a concrete wall around the perimeter of the site, as described in Objective S6.2: "a 12-foot-tall security fence would be installed along the majority of the perimeter of the project site" [DEIR page 4.10-39]. A solid barrier at the perimeter could provide 10-15 dB reduction based on simple geometry, however based on architectural renderings in Figure 4.1-3, it appears the wall has holes in it, which would dramatically reduce its effectiveness to 5 dBA reduction. Based on the contours shown in Figure 4.11-3 and the receptor noise levels shown in Table 4.11-3**, it appears the SoundPLAN model could be overestimating attenuation from the perimeter wall.**

O6-38

DEIR Figure 4.11-3 shows a 50 dBA Leq contour line around the boundaries of the project site. The site plan [DEIR page 2.0-6] shows a MWD Lot for "excess truck and trailer parking / base camp" directly adjacent to the residences on Alderbrook Drive east of the site. The DEIR analysis does not address trucks idling in this lot, other auxiliary noise sources like generators, or loud speech from shoot coordination (possibly even amplified), nor does it address if the MWD lot will be active at night. Per FHWA, idling diesel trucks emit noise at 85 dBA at 50 feet, so levels at residences along Alderbrook Drive could be as high as 68 dBA with 5 dB reduction from the perimeter fence. **Noise from trucks could exceed the City Noise Ordinance if they are idling 50% of the time during the day or 5% of the time at night.**

DEIR Figure 4.11-3 shows a 45 dBA contour line around the sound stage building from rooftop mechanical equipment. The Technical Report includes cut sheets for equipment planned for the site, including sound power levels for HVAC units from Daikin [TR page 142]. The model shown in the cut sheets would produce sound pressure levels of 77 dBA at 10 feet from the unit. It does not appear these reference levels were used in the SoundPLAN model. **It is not clear whether mechanical noise from the project would comply with the City Noise Ordinance at nearby residences due to lack of documentation of the SoundPLAN model.**

Conclusions

DEIR incorrectly applies an 80 dBA noise threshold for construction noise, based on FTA Transit Noise and Vibration Assessment Criteria, rather than using the City of Santa Clarita Noise Ordinance Limits it cites. The DEIR does not consider whether the project would generate "a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project" or use the correct City Noise Ordinance criteria. Had it done so, it would have found that construction noise will cause a significant impact to the neighboring residents. O6-39

Based on the available information it is not clear whether operational noise from the project would comply with the City Noise Ordinance at nearby residences. In particular, the model with the non-solid perimeter sound wall appears to over-estimate the wall's effectiveness.

Please feel free to contact me with any questions on this information.

Very truly yours,
WILSON IHRIG

Ani Toncheva
Senior Consultant

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WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

ANI TONCHEVA

Senior Consultant

Since joining the firm in 2011, Ani has conducted analyses for transit systems, vibration sensitive research facilities, public infrastructure, construction, and other environmental noise. She has contributed to literature reviews, including research on current practices of historical preservation. She has extensive experience working on construction projects in New York City and is well versed in local noise codes.

Education

- B.A., Physics; Bard College, New York

Professional Associations

- *Member*, National Council of Acoustical Consultants (NCAC)
- *Member*, Acoustical Society of America (ASA)
- *Board Member,* Transportation Research Forum (TRF), NY Chapter and International board

Research Paper

- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*

Relevant Experience

BART Berryessa Station Transit Noise Impact and Mitigation, San Jose, CA Assisted with noise predictions and barrier design recommendations.

Massachusetts Bay Transportation Authority (MBTA) Green Line Extension (GLX), Boston, MA Lead analyst on noise predictions and barrier design.

RTD Eagle P3 Northwest Corridor Noise and Impacts, Denver, CO Assisted with data analysis and helped prepare final technical report.

Alameda CTC, I-880 Interchange Improvements Project (Whipple Road-Industrial Southwest and Industrial Parkway West), Hayward, CA Project Manager for traffic noise study.

Alameda CTC, I-80/Ashby Avenue Interchange Improvements, Berkeley, CA Project Manager for traffic noise study.

Millennium Bulk Terminal, Longview, WA Prepared noise analysis for the project's NEPA and SEPA environmental impact statements.

Peninsula Humane Society & SPCA Haskin Hill Sanctuary, Loma Mar, CA Prepared an environmental study for a planned animal sanctuary in Loma Mar.

Analog (ArtX) Hotel, Palo Alto, CA Prepared preliminary basis of design guidelines for a new five-story boutique hotel in a residential area.

Sunnydale Block 3A & 3B Mixed-Use Residential Development, San Francisco, CA Prepared a CCR Title 24 Noise Study Report for two, mixed-use, 5-story buildings.

Columbia University Medical Center Medical and Graduate Education Building, New York, NY Conducted baseline noise survey and performed attended noise measurements during preliminary construction work.

Hudson Yards Tower C Foundations and Utilities, New York, NY Conducted a baseline noise survey prior to construction work including a combination of long-term unattended and short-term attended noise measurements.

PANYNJ Lincoln Tunnel Helix Rehabilitation, NJ Assisted in developing construction noise control and mitigation plan and implementing a remote long-term noise monitoring program at three locations.

MSK 74th Street, New York, NY Conducted baseline noise survey, assisted in developing construction noise control and mitigation plan, and implemented a long-term noise monitoring program at two locations.

NY MTA No. 7 Line Subway Extension Ventilation Facility Construction, New York, NY The project involved mining and lining of two shafts and construction of a 2-story ventilation building.

NY MTA ESA/LIRR Grand Central Terminal Fit-Out, New York, NY Prepared the Contractor's noise and vibration control plan updates for fit-out work conducted underground at the Grand Central Terminal Suburban Level.

San Francisco Planning Department, Alameda Street Wet Weather Tunnel and Folsom Area Sewer Improvement, San Francisco, CA Noise and vibration analysis for Folsom Area stormwater infrastructure improvements.

World Trade Center Vehicle Security Center, New York, NY Conducted baseline noise surveys, assisted in developing construction noise control plans, and implementing a remote long-term noise monitoring program.

50 Pine Street Condominiums, New York, NY
Project involved evaluating mechanical noise at residential dwelling units for NYC noise code

Uptown Newport, Newport Beach, CA
Evaluation of noise levels due to mechanical equipment at adjacent property.

EXHIBIT C

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Erika Iverson, Senior Planner
City Of Santa Clarita
Community Development Department
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

19 May 2023

RE: Shadowbox Studios Project

Dear Ms. Iverson,

I write to comment on potential impacts to wildlife that were analyzed in the Draft Environmental Impact Report ("DEIR") that was prepared for the Shadowbox Studios Project, which I understand would replace 93.5 acres of open space with 1,285,000 square feet of building floor space up to 55 feet tall. I also reviewed a report on biological resources prepared by Rincon (2023).

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-five years, including at many proposed project sites. My CV is attached.

O6-40

SITE VISIT

On my behalf, Noriko Smallwood, who is a wildlife biologist with a Master's Degree from California State University, Los Angeles, visited the site of the proposed project at 06:35 hours on the 14th of May 2023. She surveyed from the site's perimeter, scanning for wildlife with binoculars. The sky was partly cloudy to sunny with south winds up to 5 mph and temperatures of 57–70° F. The site was covered by annual grassland in the south, coastal sage scrub in the north, and riparian vegetation along Placerita Creek toward the northern portion of site (Photos 1 – 6). Vegetation included California buckwheat, California sagebrush, coyote bush, mule fat, California yerba santa, elderberry, cottonwood, and large mature Coast live oaks and Valley oaks scattered on site. Bordering to the east and west were ornamental trees.

Photos 1 and 2. *View of project site, 14 May 2023. Photos by Noriko Smallwood.*

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Continued

Noriko detected 40 species of vertebrate wildlife (Table 1), 6 of which are special-status species. Noriko saw harvester ants and California ground squirrels (Photos 7 and 8), which are significant because these two species are keystone species. Their presence contributes substantial ecosystem services such as soil bioturbation due to their fossorial habits, and as prey for multiple additional species including special-status species, e.g., Blainville's horned lizards feed on harvester ants, and raptors feed on ground squirrels. California ground squirrels are also mutualists with burrowing owls, as the co-habitation of these two species increases productivity of each through mutual vigilance for predators and predator alarm-calling.

Noriko also saw Allen's hummingbird and California thrasher (Photos 10 and 11), both of which are special-status species. She saw bushtits and ash-throated flycatcher (Photos 12 and 13), California quail and Bewick's wren (Photos 14 and 15), Cooper's hawk (Photo 16), which is another special-status species, and mourning dove and white-breasted nuthatch (Photos 17 and 18). She also saw California scrub-jays and common ravens (Photos 19 and 20).

Photos 3 – 6. *View of the project site, 14 May 2023. Photos by Noriko Smallwood.*

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Continued

Most of the birds Noriko observed were either foraging or engaged in behaviors typically associated with breeding. The Allen's hummingbirds and Anna's hummingbirds defended their nest territories against other birds. American crows mobbed a red-tailed hawk, likely because it flew too close to their nest site. White-breasted nuthatches delivered food to their chicks in tree cavities. Not only did Noriko see 40 species of vertebrate wildlife at the project site, but she saw that they were using the site for foraging and breeding. The project site is a productive site for wildlife.

Table 1. *Species of wildlife Noriko observed during 3.52 hours of survey on 14 May 2023.*

Common name	***Species name***	**Status[1]**	**Notes**
Harvester ant	*Pogonomyrmex sp.*		
Great Basin fence lizard	*Sceloporus occidentalis longipes*		
California quail	*Callipepla californica*		Male singing in tree
Rock pigeon	*Columba livia*	Non-native	
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	
Mourning dove	*Zenaida macroura*		
Anna's hummingbird	*Calypte anna*		Territorial
Allen's hummingbird	*Selasphorus sasin*	BCC	Territorial
Turkey vulture	*Cathartes aura*	BOP	Flew over site
Cooper's hawk	*Accipiter cooperii*	TWL, BOP	Flew low into tree
Red-tailed hawk	*Buteo jamaicensis*	BOP	Flew over site
Woodpecker sp.	*Picidae sp.*		Drumming just off site
Ash-throated flycatcher	*Myiarchus cinerascens*		
Cassin's kingbird	*Tyrannus vociferans*		
Black phoebe	*Sayornis nigricans*		
Say's phoebe	*Sayornis saya*		Foraging
California scrub-jay	*Aphelocoma californica*		
American crow	*Corvus brachyrhynchos*		Harassed red-tailed hawk
Common raven	*Corvus corax*		Many foraging, socializing
Northern rough-winged swallow	*Stelgidopteryx serripennis*		Foraging
Bushtit	*Psaltriparus minimus*		
Cedar waxwing	*Bombycilla cedrorum*		
White-breasted nuthatch	*Sitta carolinensis*		Food deliveries to nest cavity in pepper tree
Bewick's wren	*Thryomanes bewickii*		Pair chasing each other
California thrasher	*Toxostoma redivivum*	BCC	
Northern mockingbird	*Mimus polyglottos*		
European starling	*Sturnus vulgaris*	Non-native	Food deliveries, cottonwood
Western bluebird	*Sialia mexicana*		Pair foraging
House sparrow	*Passer domesticus*	Non-native	
House finch	*Haemorphous mexicanus*		
Lesser goldfinch	*Spinus psaltria*		
Song sparrow	*Melospiza melodia*		Just off site
California towhee	*Melozone crissalis*		

Common name	*Species name*	Status[1]	Notes
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	TWL	Singing from shrubs
Spotted towhee	*Pipilo maculatus*		
Coyote	*Canis latrans*		Unhealthy looking
Pocket mouse	*Perognathus sp.*		Burrows
Botta's pocket gopher	*Thomomys bottae*		Burrows
California ground squirrel	*Otospermophilus beecheyi*		Burrows and individuals
Black-tailed jackrabbit	*Lepus californicus*		Two on site
Raccoon	*Procyon lotor*		Tracks

[1] Listed as BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), BOP = Birds of Prey (California Fish and Game Code 3503.5).

Photo 7. *Harvester ants on the project site, 14 May 2023. Photo by Noriko Smallwood.*

Photo 8. *California ground squirrel on the project site, 14 May 2023. Photo by Noriko Smallwood.*

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Continued

Photo 9. *Great Basin fence lizard on site, 14 May 2023. Photo by Noriko Smallwood.*

Photos 10 and 11. *Allen's hummingbird (L) and California thrasher (R) on the project site, 14 May 2023. Photos by Noriko Smallwood.*

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Continued

Photos 12 and 13. *Bushtit (L) and ash-throated flycatcher (R) on the project site, 14 May 2023. Photos by Noriko Smallwood.*

Photo 14. *California quail on site, 14 May 2023. Photo by Noriko Smallwood.*

Photo 15. *Bewick's wren on the project site, 14 May 2023. Photos by Noriko Smallwood.*

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Continued

Photo 16. *Cooper's hawk on the project site, 14 May 2023. Photos by Noriko Smallwood.*

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Continued

Photos 17 and 18. *Mourning dove (L) and white-breasted nuthatch delivering food to chicks in nest cavity on the project site, 14 May 2023. Photos by Noriko Smallwood.*

Photos 19 and 20. *California scrub-jay (L) and common raven (R) on the project site, 14 May 2023. Photos by Noriko Smallwood.*

O6-40
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Reconnaissance-level surveys, such as the survey completed by Noriko and Rincon (2023), can be useful for confirming presence of species that were detected, but they can also be useful for estimating the number of species that were not detected. One can model the pattern in species detections during a survey as a means to estimate the number of species that used the site but were undetected during the survey. To support such a modeling effort, the observer needs to record the times into the survey when each species was first detected. I do not possess data on times into the survey when the Rincon biologists detected species of wildlife, but Noriko recorded times of detection to her data. Her cumulative number of species' detections increased with increasing survey time, but eventually with diminishing returns (Figure 1). This pattern reflects the relative ease of detecting the most conspicuous species early during the survey, and the greater difficulty with detecting the rarer and more cryptic of the species.

O6-41

In the case of Noriko's survey, the pattern in the data (Figure 1) predicts that had she spent more time on site, or had she help from additional biologists, she would have detected 68 species of vertebrate wildlife on the morning of her survey, or nearly twice the number she actually detected. Her rate of cumulative species detections exceeded the upper bound of the 95% confidence interval estimated from 291 other project sites that she and I have surveyed in California (Figure 1). The pattern in the data is substantial evidence that (1) Noriko's survey sufficed only as a sampling of the wildlife community at the project site, and (2) the project site supports a richer community of vertebrate wildlife than the majority of other sites we have surveyed throughout California. The pattern in Noriko's survey data informs that a much greater survey effort is needed at the site in order to characterize the existing environmental setting with sufficient accuracy to support a sound impacts analysis.

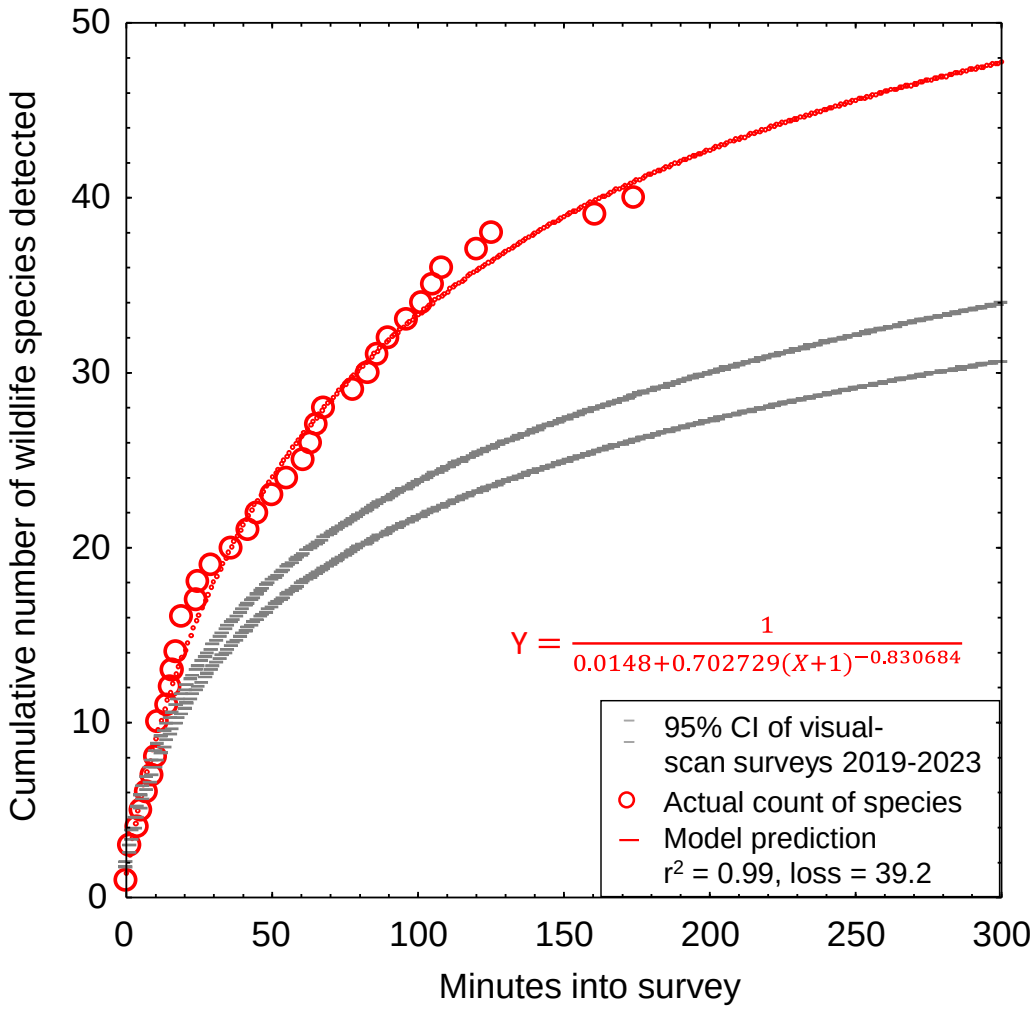

Figure 1. *Actual and predicted relationship between the number of vertebrate wildlife species detected and the elapsed survey time based on a visual-scan survey on the morning of 14 May 2023. The 95% confidence interval (CI) was based on 291 other reconnaissance-level surveys completed by Noriko Smallwood and myself at sites of proposed projects throughout California. Note that the relationship would differ if the survey was based on another method or during another season.*

The site supports more species of wildlife than Noriko could detect during her brief reconnaissance-level survey. However, although this modeling approach is useful for more realistically representing the species richness of the site at the time of a survey, it cannot represent the species richness throughout the year or across multiple years because many species are seasonal or even multi-annual in their movement patterns and in their occupancy of habitat.

By use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource

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Continued

Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods Noriko and I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I detected 14 species over the first 3.5 hours of surveys at my research site in the Altamont Pass (3.5 hours to match the number of hours Noriko surveyed at the project site), which composed 24.6% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 40 species Noriko detected after her 3.5 hours of survey at the project site likely represented 24.6% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, she would likely detect $40/0.246 = 163$ species of vertebrate wildlife at the site. Assuming her ratio of special-status to non-special-status species was to hold with through the detections of all 163 predicted species, then continued surveys would eventually detect 24 special-status species of wildlife. The combined survey outcomes of Rincon's and Noriko's lend support to my predictions, as their combined survey efforts have already detected 60 species including 11 with special status.

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Again, however, my prediction of 163 species of vertebrate wildlife, including 24 special-status species of wildlife, is derived from daytime visual-scan surveys, and would not detect nocturnal mammals such as bats. The true number of species composing the wildlife community of the site must be larger. A reconnaissance-level survey should serve only as a starting point toward characterization of a site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. Not even Rincon's (2023) focused surveys for burrowing owl and California gnatcatcher sufficiently sampled the wildlife community for the purpose of accurately characterizing the existing environmental setting. More surveys are needed.

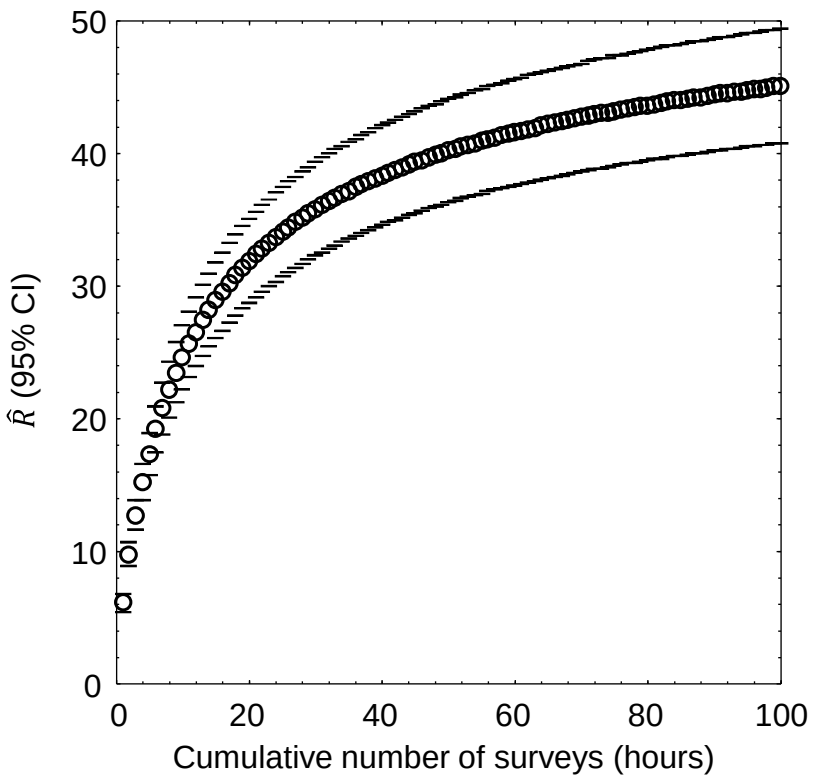

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019.*

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Continued

EXISTING ENVIRNMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the basis for determining whether the site holds habitat value to wildlife, as well as a baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of CEQA's essential analytical steps (§15125). Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of this project, these essential steps remain incomplete and misleading.

O6-42

Environmental Setting informed by Field Surveys

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, it helps for the analysis to be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

Rincon (2023:5) reports, "All biological resources encountered on-site were recorded." I have never met a biologist who would be capable of doing this; this reporting is false and misleading. It would be more accurate to report that all biological resources encountered on site, and which were familiar to the biologists, were recorded. Many species of wildlife could have made use of the site without leaving evidence that would have been recognizable by the biologists, such as burrows, tracks, scats. As biologists usually do, the Rincon biologists would have seen these types of evidence and passed them by without recording them because they wouldn't have known which species left the evidence. The biologists would not have known the identities of many of the arthropods they encountered, and indeed they recorded none. Surely the Rincon biologists must have seen the harvester ants on site, or at least their burrows or evidence of their food-gathering, but they did not report them. The Rincon biologists recorded the occurrences of many plant species, but it is doubtful they recorded all species they encountered. The DEIR should be revised to more carefully report what was seen and understood by the biologists, and it should describe the limitations of the surveys and the reporting of survey outcomes. O6-43

Two biologists from Rincon (2023) completed a reconnaissance survey of unreported duration on 20 January 2022. Not reporting the time when the survey began and the survey's duration are critical omissions that limit the reader's interpretation of the survey outcome. Unreported and unknown to the reader is whether the 23 species of vertebrate wildlife detected on site represented an impressive number after 15 minutes of survey or a dismal number after a day-long survey. Reporting that 23 species were detected in the absence of the context of survey effort is misleading. And what concerns me about the 23 species of wildlife reportedly detected is that Noriko detected nearly twice this number of vertebrate wildlife survey in only 3.5 hours and from locations around the site's perimeter. With direct access to the site and twice the number of personnel, Rincon's biologists should have seen many more species of wildlife. O6-44

Rincon (2023) reports additional species of wildlife that were detected during focused surveys for burrowing owl and California gnatcatcher, but these additional species are reported in separate reports, and the combined number of species detected across surveys is never discussed. In fact, including an incidental detection of yellow warbler by another consulting firm, Rincon (2023) includes 46 species having been detected. Simply reporting the 23 species detected only during the reconnaissance survey is accurate, but it also misleads by neglecting to mention the other 23 species that were detected during all the surveys that were completed on the project site. In fact, the 23 species detected during the reconnaissance survey is the number of species the DEIR reports to have been detected, as if this was the total number of species detected by Rincon (it was not). Considering the additional 14 species detected by Noriko on 14 May 2023, Rincon's reconnaissance survey detected only 38% of the 60 wildlife species that have been documented on site by surveys completed by professional biologists, and only 14% of the species my model predicts would be detected on site after a year or longer of additional diurnal surveys. Rincon's survey effort is deficient and their reporting is deficient. The DEIR needs to be revised with the outcomes of more surveys and with more complete reporting, and the revised DEIR needs to report the total number of species detected and not just the 23 species detected during a single reconnaissance O6-45

survey; Another 22 species were detected during the focused surveys for burrowing owls and California gnatcatcher, and another 14 species were detected by Noriko Smallwood.

O6-45 Continued

It would also help for the DEIR to note the special-status of California thrasher, Nuttall's woodpecker and wrentit, all of which are US Fish and Wildlife Service Birds of Conservation Concern. The DEIR reports the detections of these species, but not their special status.

Rincon (2023) reports important conclusions regarding the occurrence likelihoods of special-status species, but some of these conclusions are unsupportable by the evidence Rincon cites. For example, Rincon (2023) reports, "An individual Cooper's hawk was observed perched on top of a coast live oak tree within the project site during the January 2022 reconnaissance survey…; however, a nest was not observed." The addition that a nest was not observed gives the false impression that the failure to observe a nest in January would indicate the species is not nesting on the site. The same false impression was conveyed by Rincon's (2023) observation that "A single, inactive passerine nest was observed within a coast live oak tree within the project site during the reconnaissance survey" This reporting is misleading. Whether a nest was observed in January is irrelevant to the nesting status of Cooper's hawk or any passerine species on the project site. Even had the survey been completed later during the nesting season, it would have been unlikely that the biologists performing a reconnaissance survey would have seen the nest of a Cooper's hawk. To find the location of a Cooper's hawk nest, biologists typically have to spend hours observing the behaviors of Cooper's hawks. Finding the nests of Passerines is likewise quite difficult.

O6-46

As another example, Rincon (2023) reasons that the yellow warbler seen on site in April 2022 was a migrant on its way to breeding habitat elsewhere, since no breeding habitat occurs on the project site. This conclusion is based on no breeding-season surveys completed for yellow warbler on the project site. It also reveals Rincon (2023) as attempting to have it both ways by concluding that the project site is not important to wildlife movement, but yet this special-status species relied on the site for its migration to breeding habitat. In truth, the yellow warbler seen on site might have been nesting on site. Otherwise, it was stopping over on the site on its way to breeding habitat elsewhere. Either way, the site provides important habitat value to yellow warbler, despites Rincon's (2023) reasoning that it does not.

O6-47

Detection Surveys

Reports of detection surveys are included with Rincon (2023). I reviewed these reports to assess to what degrees the surveys achieved the minimum standards of the available survey protocols. The California gnatcatcher surveys achieved most of the minimum standards of USFWS (1997), but no non-breeding season surveys were completed (Table 2). Nor is there any explanation of why non-breeding season surveys were not completed.

O6-48

The burrowing owl surveys were less compliant with the available survey protocol (CDFW 2012). The surveys and their reporting failed to meet 16 of the 34 applicable

minimum standards, and only partly achieved another 4 of the standards (Table 3). In my assessment, the reported burrowing owl surveys is unreliable, and cannot support an absence determination. I suspect the authors agree with my assessment, since the report twice suggests that burrowing owls could be found on the project site in the future. The burrowing owl surveys should be repeated, but this time with more careful attention to the CDFW (2012) survey and reporting standards. I recommend that qualified biologists perform the surveys.

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Environmental Setting informed by Desktop Review

The purpose of literature and database review and of consulting with local experts is to inform the reconnaissance survey, to augment it, and to help determine which protocol-level detection surveys should be implemented. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and site conditions. This step is important because the reconnaissance survey is not going to detect all of the species of wildlife that make use of the site. This step can identity those species yet to be detected at the site but which have been documented to occur nearby or whose available habitat associations are consistent with site conditions. Some special-status species can be ruled out of further analysis, but only if compelling evidence is available in support of such determinations (see below).

Rincon (2023) and the DEIR inadequately inform of a literature and database review, i.e., the desktop review. The DEIR's desktop review is incomplete by neglecting eBird and iNaturalist, which are useful species occurrence databases that are also readily available. The DEIR provides no evidence that local experts were consulted for knowledge of occurrences of special-status species in the project area. The desktop review is incomplete, and that part of it that is presented is also flawed (see below).

O6-49

By including in the species' likelihood of occurrence analysis only species whose documented occurrences within the nearest CNDDB quadrangles, Rincon (2023) and the DEIR screen out many special-status species from further consideration in their characterization of the wildlife community as a component of the baseline environmental setting. CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Rincon (2023) and the DEIR misuse CNDDB.

Table 2. *Assessment of whether surveys achieved the standards in the USFWS's recommended California gnatcatcher survey protocol.*

Standard in USFWS (1997)	Assessment of surveys performed	Was the standard met?
Permitted biologists notify the Service ≥10 days before intended surveys	The biologist was permitted, and the Service was notified	Yes
If within NCCP process, then complete 3 surveys separated by ≥7 days between 15 March and 30 June		---
If outside NCCP process, then complete 6 surveys separated by ≥7 days between 15 March and 30 June, and 9 surveys separated by ≥14 days between 1 July and 14 March	Completed 6 breeding-season surveys but none of the required 9 non-breeding-season surveys	No
Surveys shall be conducted between 06:00 and 12:00 Hours	Surveys completed within these times	Yes
Surveys shall avoid excessive heat, wind, rain, fog, or other inclement weather		Yes
Surveys are to be call-back surveys until individuals firts detected		Yes
Slowly walk survey routes covering ≤40 ha/day in the NCCP process and ≤32 ha/day otherwise		Yes
Report survey locations, names of survey personnel, methods used, ha covered by each biologist, numbers of surveys, dates, start and stop times of surveys, weather conditions at the start of each survey, and numbers of times recordings of gnatcatcher vocalizations were broadcast	Most of the attributes were reported	Yes
Report descriptions of the vegetation communities surveyed, number, age and sex of gnatcatchers detected, and provision of all data and field notes	Vegetation communities described, but no field notes provisioned	Mostly

Part of O6-48

Table 3. *Assessment of whether burrowing owl surveys achieved the standards in CDFW's (2012) recommended survey protocol. Standards are numbered to match those in CDFW (2012).*

Standard in CDFG (2012)	Assessment of surveys completed	Was the standard met?
Minimum qualifications of biologists performing surveys and impact assessments		
(1) Familiarity with the species and local ecology	Provides only the most rudimentary characterization of ecology and natural history, and cites only one compendium as source material, i.e., there's no use of the primary literature	No
(2) Experience conducting habitat assessments and breeding and non-breeding season surveys	"The surveys were conducted … by one biologist with experience and knowledge of burrowing owl life history and sign." None of this experience is described.	No
(3) Familiarity with regulatory statutes, scientific research and conservation related to burrowing owls	None described	No
(4) Experience with analyzing impacts on burrowing owls	None described	No
Habitat assessment		
(1) Conduct at least 1 visit covering entire site and offsite buffer to 150 m	Did not survey because most of the buffer was said to be inaccessible	No
(2) Prior to site visit, compile relevant biological information on site and surrounding area	No evidence this step was accomplished	No
(3) Check available sources for occurrence records	No evidence this step was accomplished other than to query CNDDB (as reported in larger report)	No
(4) Identify vegetation cover potentially supporting burrowing owls on site and vicinity	Vegetation is described in this report	Yes
(5a) Describe project and timeline of activities	Project is not described in this report	No
(5b) Regional setting map showing project location		Yes
(5c) Detailed map with project footprint, topography, landscape and potential vegetation-altering activities	No map of project footprint nor of topography	Partial
(5d) Biological setting including location, acreage, terrain, soils, geography, hydrology, land use and management history	Location and acreage are described	Partial

Part of O6-48

Standard in CDFG (2012)	Assessment of surveys completed	Was the standard met?
(5e) Analysis of relevant historical information concerning burrowing owl use or occupancy	None	No
(5f) Vegetation cover and height typical of temporal and spatial scales relevant to the assessment		Yes
(5g) Presence of burrowing owl individuals, pairs or sign	None seen	Yes
(5h) Presence of suitable burrows or burrow surrogates	Suitable burrows noted on site	Yes
Breeding season surveys		
Perform 4 surveys separated by at least 3 weeks		Yes
1 survey between 15 February and 15 April		Yes
2-3 surveys between 15 April and 15 July		Yes
1 survey following June 15		No
Walk transects spaced 7 m to 20 m apart	Transects 10 m apart	Yes
Scan entire viewable area using binoculars at start of each transect and at 100 m intervals	No mention of this step	No
Record all potential burrow locations determined by presence of owls or sign	Found none	---
Survey when temperature >20° C (68° F), winds <12 km/hr, and cloud cover <75%	Surveyed one day when it was too cool; No mention of cloud cover	Partial
Survey between dawn and 10:00 hours or within 2 hours before sunset	Surveyed from 06:00 to 09:00 hours	Yes
Identify and discuss any adverse conditions such as disease, predation, drought, high rainfall or site disturbance	No discussion.	No
Survey several years where activities will be ongoing, annual or start-and-stop to cover high nest site fidelity		---
Reporting should include:		
(1) Survey dates with start and end times and weather conditions		Yes
(2) Qualifications of surveyor(s)	None provided	No

Part of O6-48

Standard in CDFG (2012)	Assessment of surveys completed	Was the standard met?
(3) Discussion of how survey timing affected comprehensiveness and detection probability	None provided	No
(4) Description of survey methods including point count dispersal and duration	No point counts mentioned	Partial
(5) Description and justification of the area surveyed		Yes
(6) Numbers of nestlings or juveniles associated with each pair and whether adults were banded or marked		---
(7) Descriptions of behaviors of burrowing owls observed		---
(8) List of possible burrowing owl predators in the area, including any signs of predation of burrowing owls		No
(9) Detailed map showing all burrowing owl locations and potential or occupied burrows	No map of potential burrows	No
(10) Signed field forms, photos, etc.	No field forms	No
(11) Recent color photos of project site		Yes
(12) Copies of CNDDB field forms		---

Part of O6-48

CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to CNDDB. Furthermore, CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to CNDDB than were species assigned special status since the inception of CNDDB. The lack of many CNDDB records for species recently assigned special status had nothing to do with whether the species' geographic ranges overlapped the project site, but rather the brief time for records to have accumulated since the species were assigned special status. And because negative findings are not reported to CNDDB, CNDDB cannot provide the basis for estimating occurrence likelihoods, either.

In my assessment based on database reviews and site visits, 122 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 4). Of these 122 species, 13 were confirmed on site by Rincon's (2023) surveys or by Noriko's survey, and another 9 species were seen just off site (18% on site and just off site). Another 21 (17%) have been documented within 1.5 miles of the site ('Very close'), and another 27 (22%) within 1.5 and 4 miles ('Nearby'), and another 48 (39%) within 4 to 30 miles ('In region'). More than half (57%) of the species in Table 4 have been reportedly seen within 4 miles of the project site. The site therefore supports multiple special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on proximity of recorded occurrences.

O6-49
Continued

Of the 122 special-status species of wildlife that appear in my Table 4, the DEIR addresses only 37 (30%) of them, determining only 4 of them to be present on the site. The DEIR determines occurrence potential to be high for 5 of the species, moderate for 2 species, low for 12 species, and none for 14 species. Of the 12 species assigned low potential, 2 have been recorded within 4 miles of the project site, 3 have been recorded within 1.5 miles, and another was recently recorded just off site. Of the 14 species assigned no potential to occur, 3 have been recorded within 1.5 and 4 miles of the project site, and 2 have been recorded within 1.5 miles of the site. Too many of the occurrence potentials assigned by Rincon (2023) to special-status species fail to comport with eBird and iNaturalist records or with Noriko's survey outcome.

Rincon (2023), i.e., the DEIR, makes flawed arguments in defense of occurrence likelihood determinations directed to the 26 species determined to have no potential or low potential. For example, Rincon (2023) too often cites lack of CNDDB records within 5 miles of the project site. Another related argument is that the CNDDB records are too old. As I pointed out earlier, lack of CNDDB records often las nothing to do with occurrence potential, because the CNDDB is a positive sightings database and relies on access to properties and volunteer reporting. Also, because CNDDB records are not based on scientific sampling or monitoring, the age of records has no bearing on whether species might still occur on site. The period of 30 years since the last CNDDB record of San Diego desert woodrat in the area has nothing to do with the present likelihood of occurrence of this species.

Table 4. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site.*

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Continued

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			DEIR	**Database records, Site visits**
Monarch	*Danaus plexippus*	FC	None	Very close
Crotch's bumble bee	*Bombus crotchii*	CCE		Nearby
Coast Range newt	*Taricha torosa*	SSC	Low	In region
Western spadefoot	*Spea hammondii*	SSC	Low	In region
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Low	In region
Western pond turtle	*Emys marmorata*	SSC	None	In region
Blainville's horned lizard	*Phrynosoma blainvillii*	SSC	High	Nearby
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	High	Very close
San Diegan legless lizard	*Anniella stebbinsi*	SSC	High	In region
California glossy snake	*Arizona elegans occidentalis*	SSC	Low	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	None	In region
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region
Brant	*Branta bernicla*	SSC2		In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		Nearby
Redhead	*Aythya americana*	SSC2		Nearby
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		In region
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE, BCC	None	Nearby
Black swift	*Cypseloides niger*	SSC3, BCC		Nearby
Vaux's swift	*Chaetura vauxi*	SSC2, BCC		Very close
Costa's hummingbird	*Calypte costae*	BCC		On site
Rufous hummingbird	*Selasphorus rufus*	BCC		Just off site
Allen's hummingbird	*Selasphorus sasin*	BCC		**On site**

Common name	*Species name*	Status[1]	Occurrence potential	
			DEIR	Database records, Site visits
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region
Snowy plover	*Charadrius nivosus*	BCC		In region
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC, BCC		In region
Whimbrel	*Numenius phaeopus*	BCC*		Nearby
Long-billed curlew	*Numenius americanus*	WL		Nearby
Marbled godwit	*Limosa fedoa*	BCC		In region
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region
Willet	*Tringa semipalmata*	BCC		Nearby
American avocet	*Recurvirostra americana*	BCC*		In region
Laughing gull	*Leucophaeus atricilla*	WL		In region
Heermann's gull	*Larus heermanni*	BCC		In region
Western gull	*Larus occidentalis*	BCC		Very close
California gull	*Larus californicus*	BCC, WL		Very close
California least tern	*Sternula antillarum browni*	FE, CE, FP		In region
Gull-billed tern	*Gelochelidon nilotica*	BCC, SSC3		In region
Black tern	*Chlidonias niger*	SSC2, BCC		In region
Common loon	*Gavia immer*	SSC		In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		Nearby
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC		Nearby
California brown pelican	*Pelecanus occidentalis californicus*	FP		In region
Least bittern	*Ixobrychus exilis*	SSC2		In region
White-faced ibis	*Plegadis chihi*	WL		Nearby
California condor	*Gymnogyps californianus*	FE, CE, FP	Low	Nearby
Turkey vulture	*Cathartes aura*	BOP		**On site**
Osprey	*Pandion haliaetus*	WL, BOP		Nearby
White-tailed kite	*Elanus luecurus*	CFP, BOP	Low	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL		Very close

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Continued

Common name	*Species name*	Status[1]	Occurrence potential	
			DEIR	Database records, Site visits
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP		Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		On site
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Present	**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, CFP		Nearby
Red-shouldered hawk	*Buteo lineatus*	BOP		Just off site, recent
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Low	Just off site, recent
Red-tailed hawk	*Buteo jamaicensis*	BOP		**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP		Nearby
Zone-tailed hawk	*Buteo albonotatus*	BOP		In region
Barn owl	*Tyto alba*	BOP		Just off site
Western screech-owl	*Megascops kennicotti*	BOP		Just off site
Great horned owl	*Bubo virginianus*	BOP		Just off site
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP	None	Nearby
Long-eared owl	*Asio otus*	BCC, SSC3, BOP		In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP		In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		Very close
Nuttall's woodpecker	*Picoides nuttallii*	BCC		On site
White-headed woodpecker	*Dryobates albolarvatus*	BCC		In region
American kestrel	*Falco sparverius*	BOP		On site
Merlin	*Falco columbarius*	WL, BOP		Very close
Peregrine falcon	*Falco peregrinus*	CFP, BOP		Very close
Prairie falcon	*Falco mexicanus*	WL, BOP	Low	Very close
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		Just off site
Willow flycatcher	*Empidonax trailii*	CE		Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE	None	In region
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Nearby
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	None	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2	High	Very close

Common name	*Species name*	Status[1]	Occurrence potential	
			DEIR	Database records, Site visits
Oak titmouse	*Baeolophus inornatus*	BCC		On site
California horned lark	*Eremophila alpestris actia*	WL	Moderate	Very close
Bank swallow	*Riparia riparia*	CT	None	In region
Purple martin	*Progne subis*	SSC2		Nearby
Wrentit	*Chamaea fasciata*	BCC		Just off site
California gnatcatcher	*Polioptila c. californica*	CT, SSC2	None	In region
California thrasher	*Toxostoma redivivum*	BCC	On site	**On site**
Cassin's finch	*Haemorhous cassinii*	BCC		Nearby
Lawrence's goldfinch	*Spinus lawrencei*	BCC		Just off site
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	Low	Very close
Black-chinned sparrow	*Spizella atrogularis*	BCC		Nearby
Bell's sparrow	*Amphispiza b. belli*	WL	High	Very close
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, BCC		Very close
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL	Present	**On site**
Yellow-breasted chat	*Icteria virens*	SSC3	None	Nearby
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3		Nearby
Bullock's oriole	*Icterus bullockii*	BCC		On site
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1		Nearby
Lucy's warbler	*Leiothlypis luciae*	SSC3, BCC		In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC		In region
Yellow warbler	*Setophaga petechia*	SSC2	Present	On site
Summer tanager	*Piranga rubra*	SSC1		Nearby
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	None	In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H	None	In region
Canyon bat	*Parastrellus hesperus*	WBWG:L		Very close
Big brown bat	*Episticus fuscus*	WBWG:L		Very close
Spotted bat	*Euderma maculatum*	SSC, WBWG:H	None	In range

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Continued

Common name	*Species name*	Status[1]	Occurrence potential	
			DEIR	Database records, Site visits
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H		In region
Hoary bat	*Lasiurus cinereus*	WBWG:M		In region
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H		In region
Western small-footed myotis	*Myotis cililabrum*	WBWG:M		In region
Miller's myotis	*Myotis evotis*	WBWG:M		In region
Fringed myotis	*Myotis thysanodes*	WBWG:H		In range
Long-legged myotis	*Myotis volans*	WBWG:H		In range
Yuma myotis	*Myotis yumanensis*	WBWG:LM		In region
California myotis	*Myotis californicus*	WBWG:L		In region
Western mastiff bat	*Eumops perotis*	SSC, WBWG:H	None	In region
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG:L		In region
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC	Moderate	In range
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC	Low	In region
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC		In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC	Low	In region
American badger	*Taxidea taxus*	SSC	Low	Nearby

[1] Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CT or CE = California threatened or endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game Code 3511), SSC = California Species of Special Concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).

In the case of San Diego black-tailed jackrabbit, Rincon (2023) reasons that the nearest CNDDB record was 6.25 miles away in 2005. The year of the record is irrelevant unless CNDDB was informed by a suitably designed monitoring study. As for the distance, a San Diego black-tailed jackrabbit could cover 6.25 miles in about 9 minutes. The distance is rather trivial for this species.

Another flawed argument is the pigeon-holing of species into portions of the environment than they actually use as habitat, and then to assert that those pigeon-holed environments are absent from the project site. This type of argument is applied to bats.

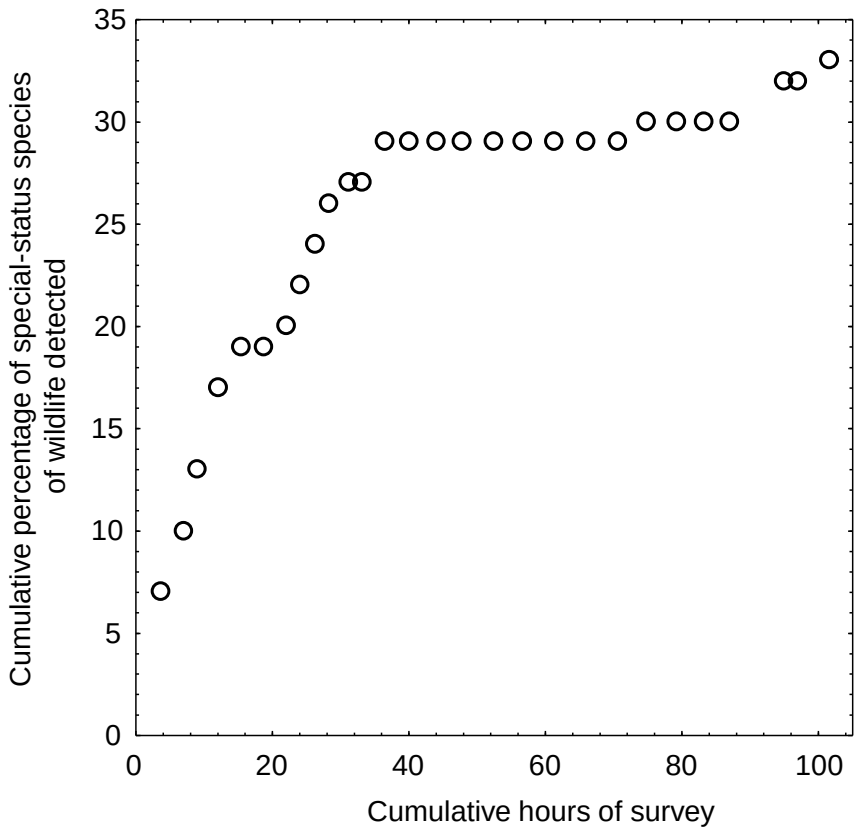
In the case of bank swallow, Rincon (2023) points out that vertical banks and cliffs are absent from the site, thereby implying, falsely, that if nest structures are absent from a site, then so is the species. If vertical banks or cliffs occur nearby, then bank swallows might very well rely on the project site for foraging in support of their nest attempts. This same type of fallacious argument is applied to California condor, prairie falcon, white-tailed kite,

In the case of American badger, Rincon (2023) defends its Low Potential determination with the argument that "no suitable burrows or diagnostic sign of the species was observed within the project site." However, I have worked with American badgers for decades, so I know from experience that badgers are expert at hiding their breeding burrows and they do not always dig into ground squirrel burrows as a hunting strategy. I have observed badgers chasing after juvenile ground squirrels. Using a thermal-imaging camera at night, I have also seen badgers walking around in areas where I saw no sign of their presence during the day. For cryptic species such as American badgers and other special-status species, the likelihood of detection during a single reconnaissance survey can be quite low (see below).

O6-49
Continued

Following up on my comment that each reconnaissance survey at a project site carries a relatively low likelihood of detection of most special-status species, I call attention to the 28 reconnaissance-level surveys I completed thus far over the last 2.5 years at a single project site in Rancho Cordova, California. During my first reconnaissance survey at this site, I detected 7 special-status species of wildlife during. Had I relied solely on that first survey to determine species' occurrences, I would have grossly under-represented the special-status species at the site (Figure 3). With additional reconnaissance surveys, I detected more special-status species, and it was not until 28 such surveys had been completed before I reached my current count of 33 special-status species of wildlife (Figure 3). It remains to be learned whether my special-status species count might increase after completion of additional surveys, but the fact is that the 27 surveys that followed my first survey increased my count by nearly 4.7-fold. My current count of special-status species is based only on reconnaissance-level surveys, so has yet to include species that might be detected by implementation of nocturnal surveys, the use of live-trapping and other methodologies, and the implementation of protocol-level detection surveys.

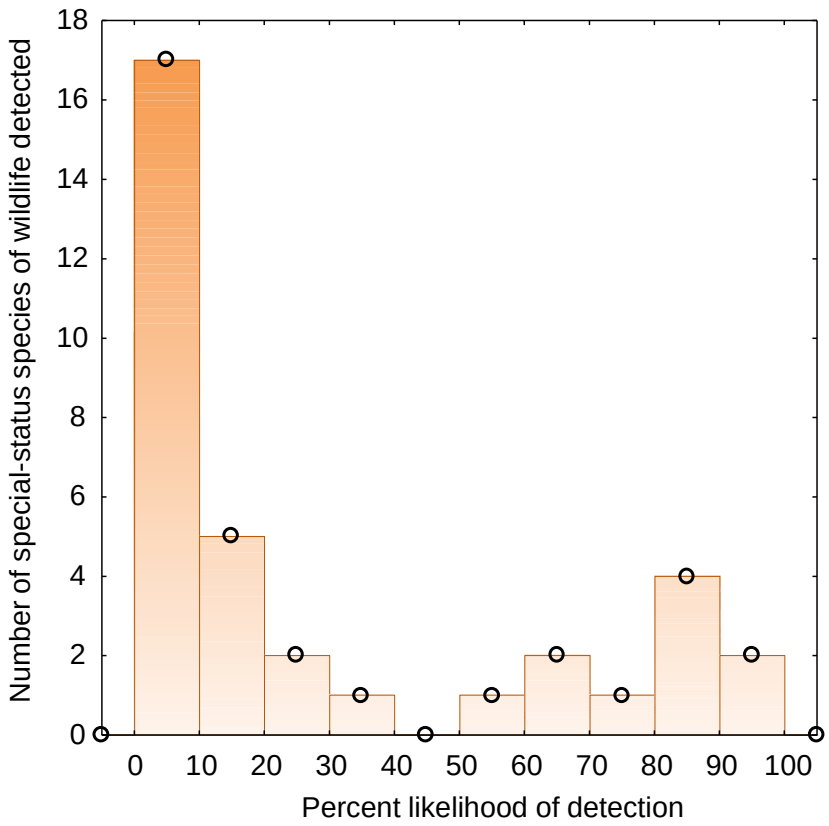
Figure 3. *Cumulative percentage of special-status species I detected with each sequential reconnaissance-level survey at a project site in Rancho Cordova, 2021-2023.*



O6-49
Continued

Only two special-status species at my Rancho Cordova site have carried 95% to 100% likelihoods of detection per reconnaissance-level survey (Figure 4), and most of the rest carried much lower likelihoods of detection. Half of the special-status species of wildlife I detected at my Rancho Cordova site carried likelihoods of detection per reconnaissance survey of only <10% (Figure 4). Assuming this distribution of species' detection likelihoods apply to the Shadowbox Studios site (there is no reason not to assume this), the 6 special-status species of wildlife detected by Rincon's (2023) biologists represent 21% of those that would be detected after another 27 reconnaissance-level surveys, then one can predict the eventual detection of 29 special-status species of wildlife. Noriko's addition of 5 special-status species after a second reconnaissance survey exceeds the rate of added species that would be predicted by my Rancho Cordova findings (see Figure 3), so her survey helps to validate my predictions summarized above.

Figure 4. *Numbers of special-status species of wildlife I detected relative to the percent likelihood of detection (number of surveys in which species was detected ÷ 28 surveys × 100%) at a project site in Rancho Cordova, California, which I surveyed 28 times over the past 2.5 years.*



O6-49
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With the foregoing, I am not arguing that at least 28 reconnaissance-level surveys are needed in support of an accurate characterization of the existing environmental setting, although the data from my Rancho Cordova site support this argument. I am merely pointing out that the survey outcomes of reconnaissance-level surveys need to be interpreted carefully within the context of what should be expected of this type of survey. It is inappropriate to assign low likelihoods of occurrence to special-status species of wildlife simply because the biologist did not detect the species during a single reconnaissance survey. At my Rancho Cordova site, 26 of the special-status species not detected during my first survey were subsequently detected in later surveys. assignments of low likelihood of occurrence are supportable only after multiple reconnaissance-level surveys or more appropriately after meeting the minimum standards of the available protocol-level detection surveys that were formulated for each species. For those species for which survey guidelines are not directly available, guidelines can sometimes be borrowed from other closely-related specie or best scientific practices can be applied.

O6-50

With the foregoing, I am also pointing out that the wildlife community of the project site is richer than Rincon (2023) and the DEIR characterize it. More special-status species occur at the site than the DEIR claims. That I am correct about this was proven by Noriko's survey. Noriko detected 14 species that Rincon did not, and she detected 5 special-status species that Rincon did not. Based on my experience, additional survey effort would reveal even more special-status species, and my models based on survey outcomes at other sites predict at least 12 to 13 special-status species of vertebrate

O6-51

wildlife are yet to be found at the site through reconnaissance-level surveys alone, Detection surveys and use of other methods would very likely increase our understanding of how many special-status species and which species occur at the site. At this point, the DEIR inaccurately informs of the wildlife community at the project site.

O6-51 Continued

POTENTIAL BIOLOGICAL IMPACTS

An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, the whole of a species, and ecological communities. In the following I analyze three types of impacts likely to result from the project, two of which are not analyzed in the DEIR, and the other is mentioned but fallaciously speculated to be of no significance.

O6-52

According to the DEIR (p. 2.0-1), "the Project Site ... comprises an undeveloped piece of land that has been cleared of the majority of its natural vegetation." And, "the majority of the Project Site have been disturbed by past uses, are relatively flat, and are characterized by low, ruderal plants and gravel driveways." On the other hand, the DEIR also reports "16 oak trees (coast live oak and valley oak) located throughout the Project Site."

HABITAT LOSS AND HABITAT FRAGMENTATION

The DEIR fails to analyze the site's capacity to support wildlife. The project area has undergone severe habitat fragmentation, which is a process widely believed to pose the greatest threat to wildlife conservation (Smallwood 2015). The project would contribute further to habitat fragmentation in an environmental setting in which wildlife would be devastated by the loss of one of the region's last patches of naturally-covered open space. Habitat fragmentation and habitat loss have been recognized as the most likely leading causes of a documented 29% decline in overall bird abundance across North America over the last 48 years (Rosenberg et al. 2019). Habitat loss not only results in the immediate numerical decline of wildlife, but it also results in permanent loss of productive capacity. All this said, the very late stage of habitat fragmentation represented at the project site warrants concern, but the DEIR expresses no concern over the project's contribution to habitat fragmentation.

O6-53

In the case of birds, two methods exist for estimating the loss of productive capacity that would be caused by the project. One method would involve surveys to count the number of bird nests and chicks produced. Such counts would need to be made in the nesting season. No effort was directed to find and record all of the bird nests on site – an effort that would be extraordinarily difficult due to the size of the project area, the numbers of birds likely to nest there, and the skill of birds at hiding their nests. The alternative method is to estimate productive capacity based on what is known of total nest density measured elsewhere. Two study sites in grassland-wetland-woodland complexes had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. Assuming the 93.5-acre project footprint supports about 60% of the total nesting density of the above-referenced study sites, one can predict a loss of 1,924 bird nests.

The loss of 1,924 nest sites would qualify as a significant project impact to birds that has not been quantitatively addressed in the DEIR. But the impact does not end with the immediate loss of nest sites as nest substrate is removed and foraging grounds graded in preparation for impervious surfaces. The reproductive capacity of the site would be lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 5,580 fledglings per year. Assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 6,350 birds per year denied to California. The DEIR proposes no mitigation for this impact. The DEIR needs to be revised to appropriately analyze the project's impacts to wildlife caused by habitat loss and habitat fragmentation.

O6-53 Continued

WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Based on the inaccurate assumption that disruption of wildlife movement corridors is the only means of a project to interfere with wildlife movement in the region, the DEIR (page ES-9 to ES-10) concludes that "The Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites." And at page 4.3-23, the DEIR concludes, "the Project's impacts related to interference with a migratory wildlife corridor, movement by native or migratory wildlife species, or a native wildlife nursery site would be less than significant." The DEIR's premise for its conclusions represents a false CEQA standard, and is therefore inappropriate to the analysis. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. A site such as the proposed project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project would cut wildlife off from one of the last remaining stopover and staging opportunities in the project area, forcing volant wildlife to travel even farther between remaining stopover sites. This impact would be significant, and as the project is currently proposed, it would be unmitigated.

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ROAD MORTALITY

A fundamental shortfall of the DEIR is its failure to analyze or to even mention the impacts of the project's added road traffic on both special-status and non-special-status species of wildlife, including many animals that would be killed far from the project's construction footprint. To patrol home ranges, disperse from natal areas, escape predators or chase down prey, and to migrate, wildlife must cross roads traversed by cars and trucks originating from or headed toward the project site (Photo 21). In the act

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of crossing roads, which again they must do, wild animals would face injury and death from project-generated traffic (Photos 22-26). The project's impacts to wildlife would add to the traffic impacts of recently constructed residential, commercial and industrial projects in the area, and would reach as far from the project as cars and trucks travel to and from the project site.

Photo 21. *A coyote crosses a California road, 21 February 2023.*

Vehicle collisions have accounted for the deaths of many thousands of amphibians, reptiles, mammals, birds, and arthropods, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America, traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local or regional impacts can be more intense than at the national level.

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Photo 22. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 23. *A Gambel's quail dashes across a road in Coachella Valley. Photo by Noriko Smallwood.*

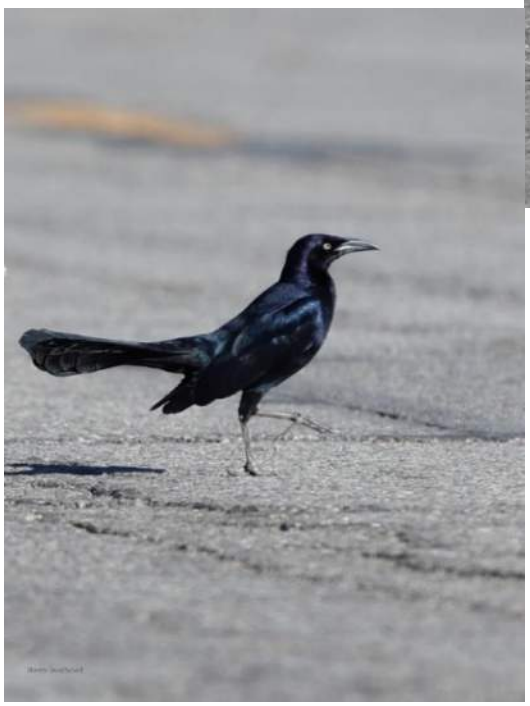

Photo 24. *Great-tailed grackle (left) walks onto a rural road in Imperial County, 4 February 2022.*

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Photo 25. *Raccoon (right) killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

Photo 26. *A mourning dove killed by vehicle traffic on a California road. Photo by Noriko Smallwood, 21 June 2020.*

In a recent study of traffic-caused wildlife mortality, investigators found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches along a 2.5-mile stretch of Vasco Road in Contra Costa County, California (Mendelsohn et al. 2009). Using carcass detection trials performed on land immediately adjacent to the traffic mortality study (Brown et al. 2016) to adjust the found fatalities for the proportion of fatalities not found due to scavenger removal and searcher error, the estimated traffic-caused fatalities was 12,187. This fatality estimate translates to a rate of 3,900 wild animals per mile per year killed. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife. The vehicle miles traveled (VMT) metric is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a

rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts to wildlife

The DEIR predicts the proposed project would result in an estimated mitigated annual VMT of 26,359,817. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of wildlife fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate applied to the mitigated annual VMT would predict 14,444 wildlife fatalities. The project's toll on wildlife could be higher or lower than I predict, but even if it is 50% lower than I predict, the toll would nevertheless be 7,222 fatalities per year, which would be substantial and highly significant.

O6-55 Continued

The DEIR should be revised to include an analysis of the potential project impacts to wildlife that would be caused by project-generated automobile traffic. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project.

BIRD-WINDOW COLLISIONS

The project would multiple building up to 55 feet in height. One of these buildings – the Office Building – would present extensive glass windows to birds attempting to use an essential portion of their habitat – that portion of the gaseous atmosphere that is referred to as the aerosphere (Davy et al. 2017, Diehl et al. 2017). The aerosphere is where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate. Birds are some of the many types of animals that evolved wings as a morphological adaptation to thrive by moving through the medium of the aerosphere. The aerosphere is habitat. Indeed, an entire discipline of ecology has emerged to study this essential aspect of habitat – the discipline of aeroecology (Kunz et al. 2008). Many special-status species of birds have been recorded at or near the aerosphere of the project site, and Noriko saw many birds using the aerosphere while she surveyed the site. Bird-window collision mortality is a potentially significant impact that warrants analysis.

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Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but these façades are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266

bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

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By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only 2 of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend

to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

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Project Impact Prediction

I reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The DEIR prepared for the Shadowbox Studios Project does not disclose the extent of glass windows on the proposed new buildings, but I was able to estimate the extent of windows by measuring the schematic depictions of them in the DEIR. I paid particular attention to the extent of windows on the Office Building, because these would be extensive. I estimate the Office Building would include 1,639 m^2 of window space. Applying the mean fatality rate (above) to my estimate of 1,639 m^2 of glass on the facades of the Office Building, I predict annual bird deaths of 120 (95% CI: 71–168).

O6-56 Continued

Because Noriko saw many birds fly across the site, I recommend exploration of alternative window layouts or alternative types of glass to minimize bird-window collisions. This can be done by comparing rates of bird flights across those portions of the aerosphere that would correspond with building locations. These rates should be measured in a program of visual-scan surveys at intervals spaced throughout a year.

CUMULATIVE IMPACTS

The cumulative effects analysis is flawed in several ways. First, at page 4.3-25, the DEIR states, "Due to the site-specific nature of biological conditions …, impacts to biological resources are typically assessed on a project-by-project basis rather than on a cumulative basis." CEQA requires a cumulative effects analysis of every project that comes under CEQA review.

Second, the DEIR acknowledges that the project would contribute to cumulative impacts because "there would be less habitat available for protected species." The DEIR then explains, "as with the Project, related projects and other future development projects would be subject to established regulations pertaining to the protection of biological resources, including those set forth in the CWA, FESA, and CESA, as well as site-specific biological resource assessments that would identify potential effects related to the existing biological conditions for that site. With adherence to applicable regulations and any site-specific recommendations set forth in a site-specific biological resource assessment, the Project and related projects would not result in significant cumulative impacts related to biological resources. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts would be less than significant." However, there are two flaws with this explanation. The first flaw is that this explanation implies that cumulative impacts are really just residual impacts of incomplete mitigation of project-level impacts. If that was CEQA's standard, then cumulative effects analysis would be merely an analysis of mitigation efficacy. But the DEIR's implied standard is not the standard of analysis of cumulative effects. Individually mitigated projects do not negate the significance of cumulative. If they did, then CEQA would not require a cumulative effects analysis.

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The second flaw of the DEIR's explanation is that, as far as I can determine, the City has no regional monitoring program of wildlife, plants or other biological resources to assess the efficacy of the mitigation measures that have been implemented at other projects. That is, there is no monitoring for cumulative effects nor for mitigation efficacy at the regional level. Therefore, there is no basis to trust the City's explanation over why the DEIR lacks any real cumulative effects analysis.

The third flaw of the DEIR's explanation is that the proposed project along with other projects in the region would be subject to existing regulations, the implication being that cumulative impacts would therefore be prevented. According to CEQA Guideline 15064(h)(3), "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable." The DEIR provides no explanation of how the project's compliance with regulations would ensure the project's contributions to cumulative impacts to biological resources would be satisfactorily mitigated.

O6-57 Continued

To summarize, the DEIR effectively provides no cumulative effects analysis. CEQA requires a cumulative effects analysis. The DEIR needs to be revised, and it needs to include an appropriate, serious analysis of cumulative impacts.

MITIGATION MEASURES

MM-BIO-1: *The Project shall implement … best management practices during construction, of which 10 are listed.*

The DEIR's best management practices should be implemented as proposed, but it needs to be understood that implementation of these practices would not reduce impacts to less-than-significant levels. The project would destroy the productive capacity of the birds that breed on the project site, and it would destroy the productive capacities of every special-status species that makes use of the site. The proposed best management practices would not prevent further habitat fragmentation and its effects on wildlife. The best management practices would not minimize or reduce impacts to wildlife caused by project-generated traffic and by collisions with expansive windows on the Office Building, nor would they lessen the project's interference with wildlife movement in the region.

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MM-BIO-2: *A qualified biological monitor familiar with special-status species with potential to occur on the Project Site shall be present during initial ground disturbance or vegetation removal activities. The biological monitor shall have the authority to temporarily stop work if one or more individuals of these special-status species are observed; the monitor shall then relocate these individuals to suitable undisturbed habitat, outside the areas directly and indirectly affected by ground disturbance activities.*

I concur that a biological monitor should be present during construction, and I concur with the authority the DEIR proposes to confer upon the monitor. However, it needs to be understood that the presence of a biological monitor would not reduce impacts to less-than-significant levels. The project would destroy the productive capacity of the birds that breed on the project site, and it would destroy the productive capacities of every special-status species that makes use of the site. The proposed biological monitor would not prevent further habitat fragmentation and its effects on wildlife. A biological monitor would not minimize or reduce impacts to wildlife caused by project-generated

traffic and by collisions with expansive windows on the Office Building, nor would the monitor lessen the project's interference with wildlife movement in the region.

Due to the size of the project site, and should the project go forward, I recommend that two biologists be assigned to monitor construction. I also recommend that preparation of a report be required to summarize all of the events that transpired involving wildlife. These events would include all instances where and when construction needed to be halted to protect wildlife, and all discoveries of wildlife that needed to be rescued or of wildlife injuries or fatalities. This report should be shared with the public.

MM-BIO-3: *Construction activities should occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than three days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird preconstruction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (500 feet for raptors), where feasible. …*

The avian breeding season recognized by the California Department of Fish and Wildlife is now 1 February through 15 September. The DEIR should be revised accordingly.

I concur that preconstruction surveys for nesting birds should be implemented. However, having performed nest surveys for many bird species, I can attest to the difficulty of finding nest sites. Birds are highly skilled at hiding their nests, because except for a few species, those that do not would fail in their nest attempts due to predation. Loggerhead shrikes and burrowing owls, as examples, make efforts to fool human observers into thinking the birds' nests are located where they are not. Locating nest sites of these species and most others requires multiple surveys over long time periods to note behavior patterns that can lead the observer to nest sites. This is why the breeding-season survey protocols require multiple surveys spaced through much of the breeding season, such as for burrowing owls (CDFW 2012) and California gnatcatchers (USFWS 1997). None of the survey protocols for breeding birds recommend surveys to be completed within 3 days, and this is because the notion that such a briefly conducted survey would detect more than a small fraction of nest sites is fantasy.

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Preconstruction surveys should be performed for nesting birds, but not without first having completed detection surveys to inform both an EIR and the preconstruction surveys of the locations of nesting birds. Preconstruction surveys are only intended as last-minute, one-time salvage and rescue operations targeting readily detectable nests or individuals before they are crushed under heavy construction machinery. Because most special-status species are rare and cryptic, and because most bird species are expert at hiding their nests lest they get predated, most of their nests will not be detected by preconstruction surveys without prior support of detection surveys. For one thing, bird species vary in the timing of their nesting. For example, at a project site that I have been searching for nest attempts over the last several months, some bird species have already turned-out fledglings and some species are re-nesting, whereas other species are just now initiating nesting behaviors. Locating all of the nests on site would require more effort than is committed during preconstruction surveys.

Regardless of whether construction timing avoids the nesting season or preconstruction surveys are completed, this measure would not reduce impacts to less-than-significant levels because the project would destroy the productive capacity of the birds that breed on the project site. Neither would the preconstruction surveys do anything to thwart or diminish the impacts of further habitat fragmentation.

Should the project go forward, I recommend that it be required of the preconstruction survey biologists prepare a report of the methods and outcomes of preconstruction surveys. The report should be made available to the public.

MM-BIO-4: *Impacts to sensitive vegetation communities shall be avoided to the greatest extent feasible. Compensatory mitigation for impacts to big sagebrush scrub and scale broom scrub communities, such as on-site restoration, off-site restoration, or purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., on-site restoration), to reduce impacts to sensitive vegetation communities shall be accomplished at a minimum ratio of 1:1; however, the final ratio shall be determined and approved by the … CDFW … At a minimum, the Restoration Plan shall include the following:*

- *A description of the purpose and goals of the restoration*
- *Identification of success criteria and performance standards*
- *Methods of site preparation*
- *Irrigation plan and schedule*
- *Best management practices*
- *Maintenance and monitoring program*
- *Adaptive management strategies*
- *Key stakeholders and responsible parties*
- *Funding*
- *Contingencies*

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The California Native Plant Society (CNPS 1998) advocates only for mitigation involving avoidance of impacts. To avoid impacts, CNPS recommends pre-project planning and design, reconfiguring an existing project, or adopting the no-project alternative, in addition to site protection such as fencing and transfer of development rights in easements or fee title.

The CNPS also recommends the mitigation exchange ratio should exceed 1:1 for most species, thereby accounting for an inevitable net loss of individuals and habitat area. Where needed, off-site compensation areas should be enhanced by reducing impacts caused by on-going activities such as over-grazing by livestock or dumping of hazardous materials or trash.

I recommend that a security deposit of ≥150% of the estimated cost of the restoration be committed prior to construction. The security deposit should be large enough to cover

the cost of additional compensatory mitigation should some portion of, or all of, the restoration fails.

MM-BIO-5 *Compensatory mitigation for temporary and permanent impacts to land subject to the jurisdiction of the … CDFW, U.S. Army Corps of Engineers (USACE), and/or Regional Water Quality Control Board (RWQCB), such as purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., on-site restoration), shall be accomplished at a minimum ratio of 1:1*; …

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Again, I recommend that a security deposit of ≥150% of the estimated cost of any restoration be committed prior to construction. The security deposit should be large enough to cover the cost of additional compensatory mitigation should some portion of, or all of, the restoration fails.

RECOMMENDED MEASURES

Protocol-level Detection Surveys in Support of Mitigation: If the project goes forward, protocol-level detection surveys that achieve minimum standards of the available guidelines need to be completed for multiple species including burrowing owl and California gnatcatcher, and a suite of special-status species of bats. These surveys are needed to (1) support negative findings of species when appropriate, (2) inform preconstruction surveys to improve their efficacy, (3) estimate project impacts, and (4) inform compensatory mitigation and other forms of mitigation. Detection survey protocols and guidelines are available from resource agencies. Otherwise, professional standards can be learned from the scientific literature and species' experts.

Pest Control: The project should commit to no use of rodenticides and avicides. It should commit to no placement of poison bait stations outside the building.

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Guidelines on Building Design to Minimize Bird-Window Collisions: If the project goes forward, it should at a minimum adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

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Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by bird-window collisions and the project-generated road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by free-ranging house cats and by collisions with windows and automobiles.

Landscaping: If the project goes forward, California native plant landscaping (i.e., chaparral, grassland, and locally appropriate scrub plants) should be considered to be used as opposed to landscaping with lawn and exotic shrubs. Native plants offer more structure, cover, food resources, and nesting substrate for wildlife than landscaping with lawn. Native plant landscaping has been shown to increase the abundance of arthropods which act as importance sources of food for wildlife and are crucial for pollination and plant reproduction (Narango et al. 2017, Adams et al. 2020, Smallwood and Wood 2022.). Further, many endangered and threated insects require native host plants for reproduction and migration, e.g., monarch butterfly. Around the world, landscaping with native plants over exotic plants increases the abundance and diversity of birds, and is particularly valuable to native birds (Lerman and Warren 2011, Burghardt et al. 2008,

Berthon et al. 2021, Smallwood and Wood 2022). Landscaping with native plants is a way to maintain or to bring back some of the natural habitat and lessen the footprint of urbanization by acting as interconnected patches of habitat for wildlife (Goddard et al. 2009, Tallamy 2020). Lastly, not only does native plant landscaping benefit wildlife, it requires less water and maintenance than traditional landscaping with lawn and hedges.

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Thank you for your attention,

Shawn Smallwood, Ph.D.

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Photo 27. *Mourning doves on the Shadowbox Studios project site, 14 May 2023. Photo by Noriko Smallwood.*

Kenneth Shawn Smallwood
Curriculum Vitae

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Born May 3, 1963 in Sacramento, California. Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 480 professional publications, including:
- 83 peer reviewed publications
- 24 in non-reviewed proceedings
- 371 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC

reviewed the science underlying the Alameda County Avian Protection Program, and advised the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their

conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science, *U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS

analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the

County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

Smallwood, K. S. 2017. Long search intervals under-estimate bird and bat fatalities caused by

wind turbines. Wildlife Society Bulletin 41:224-230.

Smallwood, K. S. 2017. The challenges of addressing wildlife impacts when repowering wind energy projects. Pages 175-187 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine–wildlife interactions. Pages 255-276 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Siting to Minimize Raptor Collisions: an example from the Repowering Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

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Mete, A., N. Stephenson, K. Rogers, M. G. Hawkins, M. Sadar, D. Guzman, D. A. Bell, J. Shipman, A. Wells, K. S. Smallwood, and J. Foley. 2014. Emergence of Knemidocoptic mange in wild Golden Eagles (Aquila chrysaetos) in California. Emerging Infectious Diseases 20(10):1716-1718.

Smallwood, K. S. 2013. Introduction: Wind-energy development and wildlife conservation. Wildlife Society Bulletin 37: 3-4.

Smallwood, K. S. 2013. Comparing bird and bat fatality-rate estimates among North American wind-energy projects. Wildlife Society Bulletin 37:19-33. + Online Supplemental Material.

Smallwood, K. S., L. Neher, J. Mount, and R. C. E. Culver. 2013. Nesting Burrowing Owl Abundance in the Altamont Pass Wind Resource Area, California. Wildlife Society Bulletin: 37:787-795.

Smallwood, K. S., D. A. Bell, B. Karas, and S. A. Snyder. 2013. Response to Huso and Erickson Comments on Novel Scavenger Removal Trials. Journal of Wildlife Management 77: 216-225.

Bell, D. A., and K. S. Smallwood. 2010. Birds of prey remain at risk. Science 330:913.

Smallwood, K. S., D. A. Bell, S. A. Snyder, and J. E. DiDonato. 2010. Novel scavenger removal trials increase estimates of wind turbine-caused avian fatality rates. Journal of Wildlife Management 74: 1089-1097 + Online Supplemental Material.

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Comments on Environmental Documents

I was retained or commissioned to comment on environmental planning and review documents, including:

- The Villages of Lakeview EIR (2017; 28 pp);
- Notes on Proposed Study Options for Trail Impacts on Northern Spotted Owl (2017; 4 pp);
- San Gorgonio Crossings EIR (2017; 22 pp);
- Replies to responses on Jupiter Project IS and MND (2017; 12 pp);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12 pp);
- Central SoMa Plan DEIR (2017; 14 pp);
- Colony Commerce Center Specific Plan DEIR (2016; 16 pp);
- Fairway Trails Improvements MND (2016; 13 pp);
- Review of Avian-Solar Science Plan (2016; 28 pp);
- Replies to responses on Initial Study for Pyramid Asphalt (2016; 5 pp);
- Initial Study for Pyramid Asphalt (2016; 4 pp);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14 pp);
- Santa Anita Warehouse IS and MND (2016; 12 pp);
- CapRock Distribution Center III DEIR (2016: 12 pp);
- Orange Show Logistics Center Initial Study and MND (2016; 9 pp);
- City of Palmdale Oasis Medical Village Project IS and MND (2016; 7 pp);
- Comments on proposed rule for incidental eagle take (2016, 49 pp);
- Grapevine Specific and Community Plan FEIR (2016; 25 pp);
- Grapevine Specific and Community Plan DEIR (2016; 15 pp);
- Clinton County Zoning Ordinance for Wind Turbine siting (2016);
- Hallmark at Shenandoah Warehouse Project Initial Study (2016; 6 pp);
- Tri-City Industrial Complex Initial Study (2016; 5 pp);
- Hidden Canyon Industrial Park Plot Plan 16-PP-02 (2016; 12 pp);
- Kimball Business Park DEIR (2016; 10 pp);
- Jupiter Project IS and MND (2016; 9 pp);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18 pp);
- Palo Verde Mesa Solar Project Draft Environmental Impact Report (2016; 27 pp);

- Reply Witness Statement on Fairview Wind Project, Ontario, Canada (2016; 14 pp);
- Fairview Wind Project, Ontario, Canada (2016; 41 pp);
- Supplementary Reply Witness Statement Amherst Island Wind Farm, Ontario (2015, 38 pp);
- Witness Statement on Amherst Island Wind Farm, Ontario (2015, 31 pp);
- Second Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 6 pp);
- Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 10 pp);
- Witness Statement on White Pines Wind Farm, Ontario (2015, 9 pp);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9 pp);
- Replies to comments 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6 pp);
- Willow Springs Solar Photovoltaic Project DEIR (2015; 28 pp);
- Sierra Lakes Commerce Center Project DEIR (2015, 9 pp);
- Columbia Business Center MND (2015; 8 pp);
- West Valley Logistics Center Specific Plan DEIR (2015, 10 pp);
- World Logistic Center Specific Plan FEIR (2015, 12 pp);
- Bay Delta Conservation Plan EIR/EIS (2014, 21 pp);
- Addison Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Addison Wind Energy Project DEIR (2014, 15 pp);
- Addison and Rising Tree Wind Energy Project FEIR (2014, 12 pp);
- Alta East Wind Energy Project FEIS (2013, 23 pp);
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16 pp);
- Clearwater and Yakima Solar Projects DEIR (2013, 9 pp);
- Cuyama Solar Project DEIR (2014, 19 pp);
- Draft Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49 pp);
- Kingbird Solar Photovoltaic Project EIR (2013, 19 pp);
- Lucerne Valley Solar Project Initial Study & Mitigated Negative Declaration (2013, 12 pp);
- Palen Solar Electric Generating System Final Staff Assessment of California Energy Commission, (2014, 20 pp);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9 pp);
- Rising Tree Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Rising Tree Wind Energy Project DEIR (2014, 15 pp);
- Soitec Solar Development Project Draft PEIR (2014, 18 pp);
- Comment on the Biological Opinion (08ESMF-00-2012-F-0387) of Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3 pp);
- West Antelope Solar Energy Project Initial Study and Negative Declaration (2013, 18 pp);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28 pp);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10 pp);
- Declaration on Tule Wind project FEIR/FEIS (2013; 24 pp);
- Sunlight Partners LANDPRO Solar Project Mitigated Negative Declaration (2013; 11 pp);
- Declaration in opposition to BLM fracking (2013; 5 pp);
- Rosamond Solar Project Addendum EIR (2013; 13 pp);
- Pioneer Green Solar Project EIR (2013; 13 pp);
- Reply to Staff Responses to Comments on Soccer Center Solar Project Mitigated Negative

Declaration (2013; 6 pp);
- Soccer Center Solar Project Mitigated Negative Declaration (2013; 10 pp);
- Plainview Solar Works Mitigated Negative Declaration (2013; 10 pp);
- Reply to the County Staff's Responses on comments to Imperial Valley Solar Company 2 Project (2013; 10 pp);
- Imperial Valley Solar Company 2 Project (2013; 13 pp);
- FRV Orion Solar Project DEIR (PP12232) (2013; 9 pp);
- Casa Diablo IV Geothermal Development Project (3013; 6 pp);
- Reply to Staff Responses to Comments on Casa Diablo IV Geothermal Development Project (2013; 8 pp);
- FEIS prepared for Alta East Wind Project (2013; 23 pp);
- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Map and Rezoning Project DEIR (2013; 9 pp);
- Analysis of Biological Assessment of Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10 pp);
- Declaration on Campo Verde Solar project FEIR (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8 pp);
- Declaration on North Steens Transmission Line FEIS (2012; 62 pp);
- City of Lancaster Revised Initial Study for Conditional Use Permits 12-08 and 12-09, Summer Solar and Springtime Solar Projects (2012; 8 pp);
- J&J Ranch, 24 Adobe Lane Environmental Review (2012; 14 pp);
- Reply to the County Staff's Responses on comments to Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 8 pp);
- Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 9 pp);
- Desert Harvest Solar Project EIS (2012; 15 pp);
- Solar Gen 2 Array Project DEIR (2012; 16 pp);
- Ocotillo Sol Project EIS (2012; 4 pp);
- Beacon Photovoltaic Project DEIR (2012; 5 pp);
- Declaration on Initial Study and Proposed Negative Declaration for the Butte Water District 2012 Water Transfer Program (2012; 11 pp);
- Mount Signal and Calexico Solar Farm Projects DEIR (2011; 16 pp);
- City of Elk Grove Sphere of Influence EIR (2011; 28 pp);
- Comment on Sutter Landing Park Solar Photovoltaic Project MND (2011; 9 pp);
- Statement of Shawn Smallwood, Ph.D. Regarding Proposed Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4 pp);
- Declaration of K. Shawn Smallwood on Biological Impacts of the Ivanpah Solar Electric Generating System (ISEGS) (2011; 9 pp);
- Comments on Draft Eagle Conservation Plan Guidance (2011; 13 pp);
- Comments on Draft EIR/EA for Niles Canyon Safety Improvement Project (2011; 16 pp);
- Declaration of K. Shawn Smallwood, Ph.D., on Biological Impacts of the Route 84 Safety Improvement Project (2011; 7 pp);
- Rebuttal Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of Intervenors Friends of The Columbia Gorge & Save Our Scenic Area (2010; 6 pp);
- Prefiled Direct Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of

Intervenors Friends of the Columbia Gorge & Save Our Scenic Area. Comments on Whistling Ridge Wind Energy Power Project DEIS, Skamania County, Washington (2010; 41 pp);

- Evaluation of Klickitat County's Decisions on the Windy Flats West Wind Energy Project (2010; 17 pp);
- St. John's Church Project Draft Environmental Impact Report (2010; 14 pp.);
- Initial Study/Mitigated Negative Declaration for Results Radio Zone File #2009-001 (2010; 20 pp);
- Rio del Oro Specific Plan Project Final Environmental Impact Report (2010;12 pp);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009: 9 pp);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Second Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Dec 2008; 17 pp);
- Comments on Draft 1A Summary Report to CAISO (2008; 10 pp);
- County of Placer's Categorical Exemption of Hilton Manor Project (2009; 9 pp);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3 pp);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142 pp);
- Delta Shores Project EIR, south Sacramento (2009; 11 pp + addendum 2 pp);
- Declaration of Shawn Smallwood in Support of Care's Petition to Modify D.07-09-040 (2008; 3 pp);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9 pp);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11 pp);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7 pp.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Sep 2008; 16 pp);
- California Energy Commission's Preliminary Staff Assessment of the Colusa Generating Station (2007; 24 pp);
- Rio del Oro Specific Plan Project Recirculated Draft Environmental Impact Report (2008: 66 pp);
- Replies to Response to Comments Re: Regional University Specific Plan Environmental Impact Report (2008; 20 pp);
- Regional University Specific Plan Environmental Impact Report (2008: 33 pp.);
- Clark Precast, LLC's "Sugarland" project, Negative Declaration (2008: 15 pp.);
- Cape Wind Project Draft Environmental Impact Statement (2008; 157 pp.);
- Yuba Highlands Specific Plan (or Area Plan) Environmental Impact Report (2006; 37 pp.);
- Replies to responses to comments on Mitigated Negative Declaration of the proposed

Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 5 pp);

- Mitigated Negative Declaration of the proposed Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 15 pp);
- Windy Point Wind Farm Environmental Review and EIS (2006; 14 pp and 36 Powerpoint slides in reply to responses to comments);
- Shiloh I Wind Power Project EIR (2005; 18 pp);
- Buena Vista Wind Energy Project Notice of Preparation of EIR (2004; 15 pp);
- Negative Declaration of the proposed Callahan Estates Subdivision (2004; 11 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 9 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 13 pp);
- Negative Declaration of the proposed Creekside Highlands Project, Tract 7270 (2004; 21 pp);
- On the petition California Fish and Game Commission to list the Burrowing Owl as threatened or endangered (2003; 10 pp);
- Conditional Use Permit renewals from Alameda County for wind turbine operations in the Altamont Pass Wind Resource Area (2003; 41 pp);
- UC Davis Long Range Development Plan of 2003, particularly with regard to the Neighborhood Master Plan (2003; 23 pp);
- Anderson Marketplace Draft Environmental Impact Report (2003: 18 pp + 3 plates of photos);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003: 6 pp);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002: 23 pp);
- Response to testimony of experts at the East Altamont Energy Center evidentiary hearing on biological resources (2002: 9 pp);
- Revised Draft Environmental Impact Report, The Promenade (2002: 7 pp);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002: 3 pp);
- UC Merced -- Declaration of Dr. Shawn Smallwood in support of petitioner's application for temporary restraining order and preliminary injunction (2002: 5 pp);
- Replies to response to comments in Final Environmental Impact Report, Atwood Ranch Unit III Subdivision (2003: 22 pp);
- Draft Environmental Impact Report, Atwood Ranch Unit III Subdivision (2002: 19 pp + 8 photos on 4 plates);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002: 17 pp + 3 photos; follow-up report of 3 pp);
- Initial Study and Negative Declaration, Silver Bend Apartments, Placer County (2002: 13 pp);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001: 26 pp);
- Initial Study, Colusa County Power Plant (2001: 6 pp);
- Comments on Proposed Dog Park at Catlin Park, Folsom, California (2001: 5 pp + 4 photos);
- Pacific Lumber Co. (Headwaters) Habitat Conservation Plan and Environmental Impact Report (1998: 28 pp);
- Final Environmental Impact Report/Statement for Issuance of Take authorization for listed

species within the MSCP planning area in San Diego County, California (Fed. Reg. 62 (60): 14938, San Diego Multi-Species Conservation Program) (1997: 10 pp);

- Permit (PRT-823773) Amendment for the Natomas Basin Habitat Conservation Plan, Sacramento, CA (Fed. Reg. 63 (101): 29020-29021) (1998);
- Draft Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). (Fed. Reg. 64(176): 49497-49498) (1999: 8 pp);
- Review of the Draft Recovery Plan for the Arroyo Southwestern Toad (*Bufo microscaphus californicus*) (1998);
- Ballona West Bluffs Project Environmental Impact Report (1999: oral presentation);
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Negative Declaration for the Sunset Skyranch Airport Use Permit (1999);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000: 10 pp);
- California Energy Commission's Final Staff Assessment of the proposed Metcalf Energy Center (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000: 4 pp);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11 pp);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7 pp);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9 pp).

Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12 pp);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8 pp);
- Draft Program Level EIR for Covell Village (2005; 19 pp);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping document (2003: 7 pp.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7 pp);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8 pp.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35 pp.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2 pp.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7 pp.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10 pp.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7 pp.);

- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10 pp);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 pp + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No. 103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian

fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Repowering the Altamont Pass. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat Agency, Newark, California, 3 February 2017.

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind

power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa

Barbara, 27 October 2006.

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association,

Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

“No Surprises” -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993.

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion; Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.

- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.

- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.

- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.

- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

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Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	**Journal**
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of $553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines, Amherst Island, and Fairview Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

Representative Clients/Funders

Law Offices of Stephan C. Volker
Blum Collins, LLP
Eric K. Gillespie Professional Corporation
Law Offices of Berger & Montague
Lozeau | Drury LLP
Law Offices of Roy Haber
Law Offices of Edward MacDonald
Law Office of John Gabrielli
Law Office of Bill Kopper
Law Office of Donald B. Mooney
Law Office of Veneruso & Moncharsh
Law Office of Steven Thompson
Law Office of Brian Gaffney
California Wildlife Federation
Defenders of Wildlife
Sierra Club
National Endangered Species Network
Spirit of the Sage Council
The Humane Society
Hagens Berman LLP
Environmental Protection Information Center
Goldberg, Kamin & Garvin, Attorneys at Law
Californians for Renewable Energy (CARE)
Seatuck Environmental Association
Friends of the Columbia Gorge, Inc.
Save Our Scenic Area
Alliance to Protect Nantucket Sound
Friends of the Swainson's Hawk
Alameda Creek Alliance
Center for Biological Diversity
California Native Plant Society
Endangered Wildlife Trust
and BirdLife South Africa
AquAlliance
Oregon Natural Desert Association
Save Our Sound
G3 Energy and Pattern Energy
Emerald Farms
Pacific Gas & Electric Co.
Southern California Edison Co.
Georgia-Pacific Timber Co.
Northern Territories Inc.
David Magney Environmental Consulting
Wildlife History Foundation
NextEra Energy Resources, LLC
Ogin, Inc.
EDF Renewables
National Renewable Energy Lab
Altamont Winds LLC
Salka Energy
Comstocks Business (magazine)
BioResource Consultants
Tierra Data
Black and Veatch
Terry Preston, Wildlife Ecology Research Center
EcoStat, Inc.
US Navy
US Department of Agriculture
US Forest Service
US Fish & Wildlife Service
US Department of Justice
California Energy Commission
California Office of the Attorney General
California Department of Fish & Wildlife
California Department of Transportation
California Department of Forestry
California Department of Food & Agriculture
Ventura County Counsel
County of Yolo
Tahoe Regional Planning Agency
Sustainable Agriculture Research & Education Program
Sacramento-Yolo Mosquito and Vector Control District
East Bay Regional Park District
County of Alameda
Don & LaNelle Silverstien
Seventh Day Adventist Church
Escuela de la Raza Unida
Susan Pelican and Howard Beeman
Residents Against Inconsistent Development, Inc.
Bob Sarvey
Mike Boyd
Hillcroft Neighborhood Fund
Joint Labor Management Committee, Retail Food Industry
Lisa Rocca
Kevin Jackson
Dawn Stover and Jay Letto
Nancy Havassy
Catherine Portman (for Brenda Cedarblade)
Ventus Environmental Solutions, Inc.
Panorama Environmental, Inc.
Adams Broadwell Professional Corporation

Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	*Rana aurora draytonii*	Protocol searches; Many detections
Foothill yellow-legged frog	*Rana boylii*	Presence surveys; Many detections
Western spadefoot	*Spea hammondii*	Presence surveys; Few detections
California tiger salamander	*Ambystoma californiense*	Protocol searches; Many detections
Coast range newt	*Taricha torosa torosa*	Searches and multiple detections
Blunt-nosed leopard lizard	*Gambelia sila*	Detected in San Luis Obispo County
California horned lizard	*Phrynosoma coronatum frontale*	Searches; Many detections
Western pond turtle	*Clemmys marmorata*	Searches; Many detections
San Joaquin kit fox	*Vulpes macrotis mutica*	Protocol searches; detections
Sumatran tiger	*Panthera tigris*	Track surveys in Sumatra
Mountain lion	*Puma concolor californicus*	Research and publications
Point Arena mountain beaver	*Aplodontia rufa nigra*	Remote camera operation
Giant kangaroo rat	*Dipodomys ingens*	Detected in Cholame Valley
San Joaquin kangaroo rat	*Dipodomys nitratoides*	Monitoring & habitat restoration
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	Non-target captures and mapping of dens
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Habitat assessment, monitoring
Salinas harvest mouse	*Reithrodontomys megalotus distichlus*	Captures; habitat assessment
Bats		Thermal imaging surveys
California clapper rail	*Rallus longirostris*	Surveys and detections
Golden eagle	*Aquila chrysaetos*	Numerical & behavioral surveys
Swainson's hawk	*Buteo swainsoni*	Numerical & behavioral surveys
Northern harrier	*Circus cyaeneus*	Numerical & behavioral surveys
White-tailed kite	*Elanus leucurus*	Numerical & behavioral surveys
Loggerhead shrike	*Lanius ludovicianus*	Large area surveys
Least Bell's vireo	*Vireo bellii pusillus*	Detected in Monterey County
Willow flycatcher	*Empidonax traillii extimus*	Research at Sierra Nevada breeding sites
Burrowing owl	*Athene cunicularia hypugia*	Numerical & behavioral surveys
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Monitored success of relocation and habitat restoration
Analytical		
Arroyo southwestern toad	*Bufo microscaphus californicus*	Research and report.
Giant garter snake	*Thamnophis gigas*	Research and publication
Northern goshawk	*Accipiter gentilis*	Research and publication
Northern spotted owl	*Strix occidentalis*	Research and reports
Alameda whipsnake	*Masticophis lateralis euryxanthus*	Expert testimony

EXHIBIT D

794 Sawnee Bean Road
Thetford Center VT 05075

Norman Marshall, President
(802) 356-2969

nmarshall@smartmobility.com

May 19, 2023

Richard M. Franco
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Subject: Comments on the Shadowbox Studio Project

Dear Mr. Franco,

I have reviewed vehicle miles traveled ("VMT") impacts in the City of Santa Clarita Shadowbox Project Draft Environmental Impact Report ("DEIR"). I make the following findings:

1) The proposed project is not in a VMT-efficient location as is demonstrated in a City of Santa Clarita graphic included in the DEIR. The DEIR's assertion that the project is in a VMT-efficient location is based on an outdated transportation model with a base year of 2012 that is known to underestimate commute VMT. Census data indicate that the actual average commute distances of workers employed in the project area is 2.8 times as great as asserted in the DEIR. The DEIR must be revised to include a realistic estimate of VMT impacts. **O6-60**

2) The DEIR estimates that the project would create about 2,333 direct jobs. Many of these jobs would not represent permanent workers but instead be workers attached to temporary projects including many independent contractors as well as many employed by offsite businesses. This is inherently different from a large warehouse project or large retail project where permanent workers would include a large proportion of local workers. The project submittal should include a thorough analysis of the likely composition of the workforce and compute realistic commute distances based on Census data. **O6-61**

3) The project's VMT impacts require mitigation, but most workers would commute to the project by single-occupant auto. The Metrolink stop located 0.5 mile from the project's entrance fails to provide adequate service for reverse commuters from locations to the south because there is 3 hours between afternoon/early evening departures. The DEIR asserts the project will provide flexible work schedules, telecommuting, and guaranteed rides home, but it doesn't explain how these can be implemented in this project. Who is providing these benefits? Is it the overall project owner, those who lease particular soundstages, short-term renters of soundstages, or the businesses who employ the workers? What benefits do independent contractors get and how are they provided? Are workers able to quit work at a certain time to catch their bus while video shooting continues? The DEIR does not answer these questions.

O6-62

4) The project's greenhouse gas ("GHG") emissions are also underestimated in the DEIR. The number of daily vehicle trips assumed in the air quality analysis is less than the number of trips reported in the transportation analysis. The default average trip lengths used in the air quality analysis are lower than the distances calculated from Census data. After VMT is calculated correctly, the GHG analysis should be redone with the corrected VMT.

O6-63

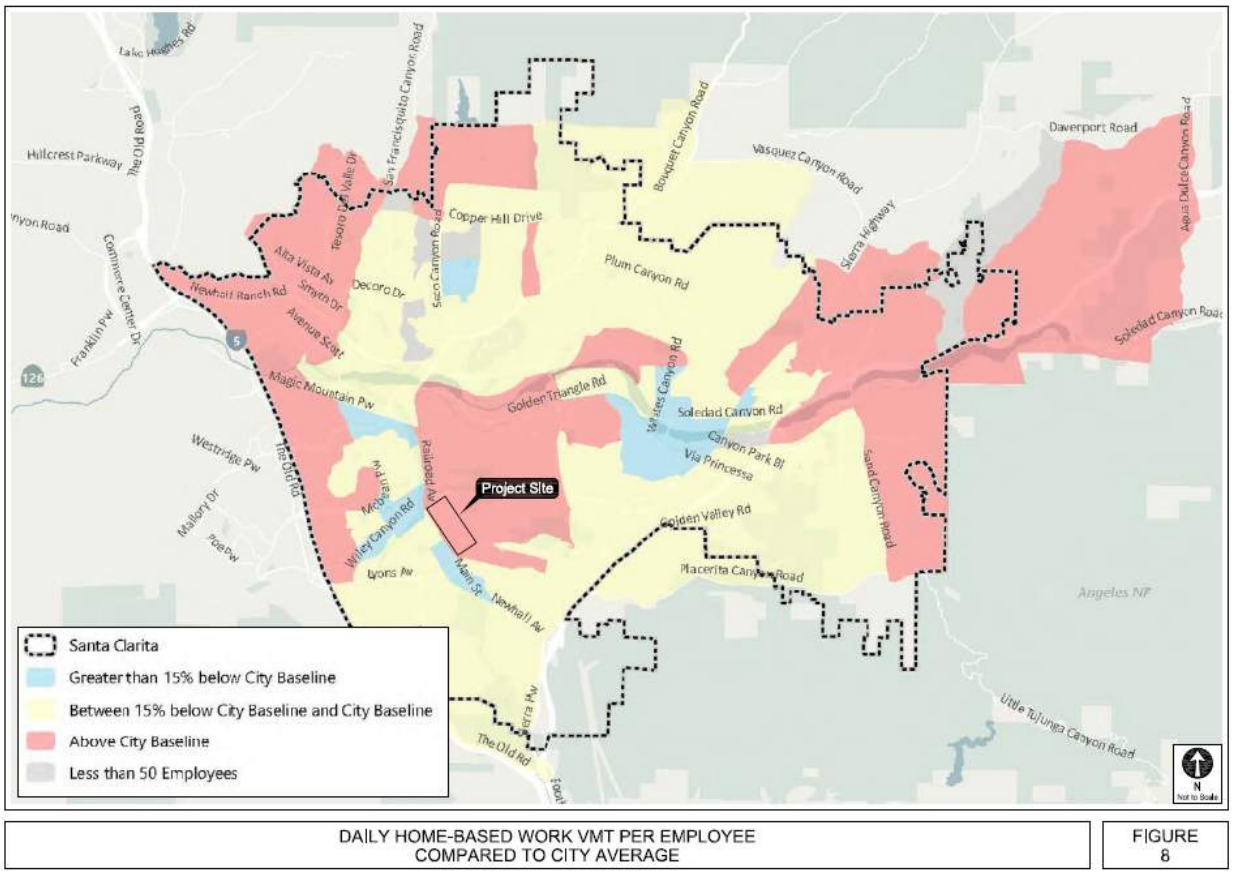
The Proposed Project is Not in a VMT-Efficient Location

The DEIR documents that the project is not in a VMT-efficient location. It states:

> As shown in Figure 8, the Project Site lies within zones that have a greater daily home-based work VMT per employee than the City baseline and, therefore, requires further study. (App. L, p. 30)

This figure is reproduced below as Figure 1.

Figure 1: DEIR Graphic Showing Project is NOT in VMT-Efficient Area (reproduced from Appendix L, Figure 8, p. 32)



The map shown in Figure 1 is reproduced from *Transportation Analysis Updates in Santa Clarita* (May 19, 2020) and is derived from a Southern California Association of Governments ("SCAG") model with a base year of 2012 developed for the *2016 Regional Transportation Plan / Sustainable Communities Strategy* (*Transportation Updates*, p. 13).

The DEIR asserts that applying the same SCAG transportation model shows that the project is in a VMT-efficient location. The DEIR states:

> According to the Transportation Assessment prepared for the Project (see Appendix L and Section 4.14, Transportation, of this Draft EIR), the average home-based-work VMT per employee for the City of Santa Clarita is 17.9. The Project would have a home-

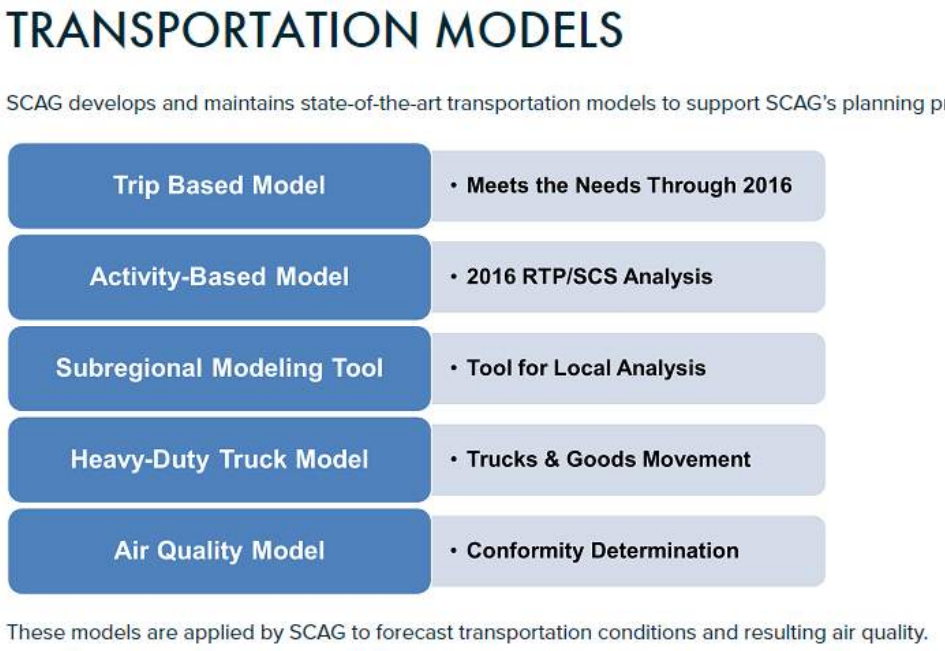
O6-64

> based-work VMT per employee of 14.0, which is less than the Citywide average. (DEIR, p. 4.2-21)

As the same model was used was used both to create Figure 1 and the DEIR, it would be expected that the result would be the same, i.e., that the project is not located in a VMT-efficient location. In addition, the citywide average given in the DEIR excerpt reproduced above, 17.9, is different than the citywide average given in the *Transportation Analysis Updates in Santa Clarita*, 21.0 (Table 6, p. 21). These discrepancies are not explained or justified in the DEIR. This makes me skeptical about the DEIR modeling.

Even if the DEIR analysis was done properly and the results were reported accurately, this analysis would be invalid because the model applied is outdated and known to underestimate commuting VMT. The SCAG 2016 RTP/SCS Regional Travel Demand Model was replaced in 2020 with a newer and much more complex regional travel demand model with a base year of 2016. Figure 2 shows that SCAG considers the model used in the DEIR only "meets the needs through 2016."

Figure 2: SCAG Transportation Models[1]



O6-64
Continued

[1] https://scag.ca.gov/transportation-models

The problems with the model used in the DEIR are much greater than just that it is out of date. The VMT metric in the DEIR represents average commute distance. Both the 2016 and 2020 SCAG models used the 2011 California Household Travel Survey ("CHTS") data in estimating commute trip length.[2] [3] But the 2020 effort also relied on Census data and the 2020 model validation report stated:

> The workplace location model was compared to trip length frequency information obtained from the 2011 CHTS and the 2014 Longitudinal Employment – Household Dynamics (LEHD) dataset, and County-to-County flows obtained from the 2011 CHTS and 2011-2015 Census Transportation Planning Product (CTPP). The LEHD data was used to calibrate the tail of the trip length distribution, because there were few observations of these long commute patterns captured in the CHTS.

For the SCAG region, the 2020 report on the updated model reported that the average commute distances across the entire region are:

- CHTS 12.5 miles, vs.
- LEHD (Census) 20.6 miles.

O6-64
Continued

The Census average commute length is **65% higher** than the average in the CHTS data that were used to calibrate the outdated model used in the DEIR. Any commute length estimates based on the outdated model, including those reported in the DEIR, significantly underestimate work trip VMT. Furthermore, this was known by travel demand modelers in the region in 2020 – well prior to the DEIR estimate that was prepared in 2021 (Iteris, Inc. memo dated August 24, 2021, included in DEIR App. L, p. 309-312 of 2130). The City should update its guidance, but outdated guidance is not an adequate excuse for mispresenting the project's VMT impacts.

Rather than relying on an outdated model known to greatly underestimate commute trip lengths, it is much more accurate to use actual data on trip lengths. The U.S. Census Bureau publishes Longitudinal Employer-Household Dynamics ("LEHD") Origin-Destination Employment Statistics ("LODES") data that provide detailed geographic data about workers.

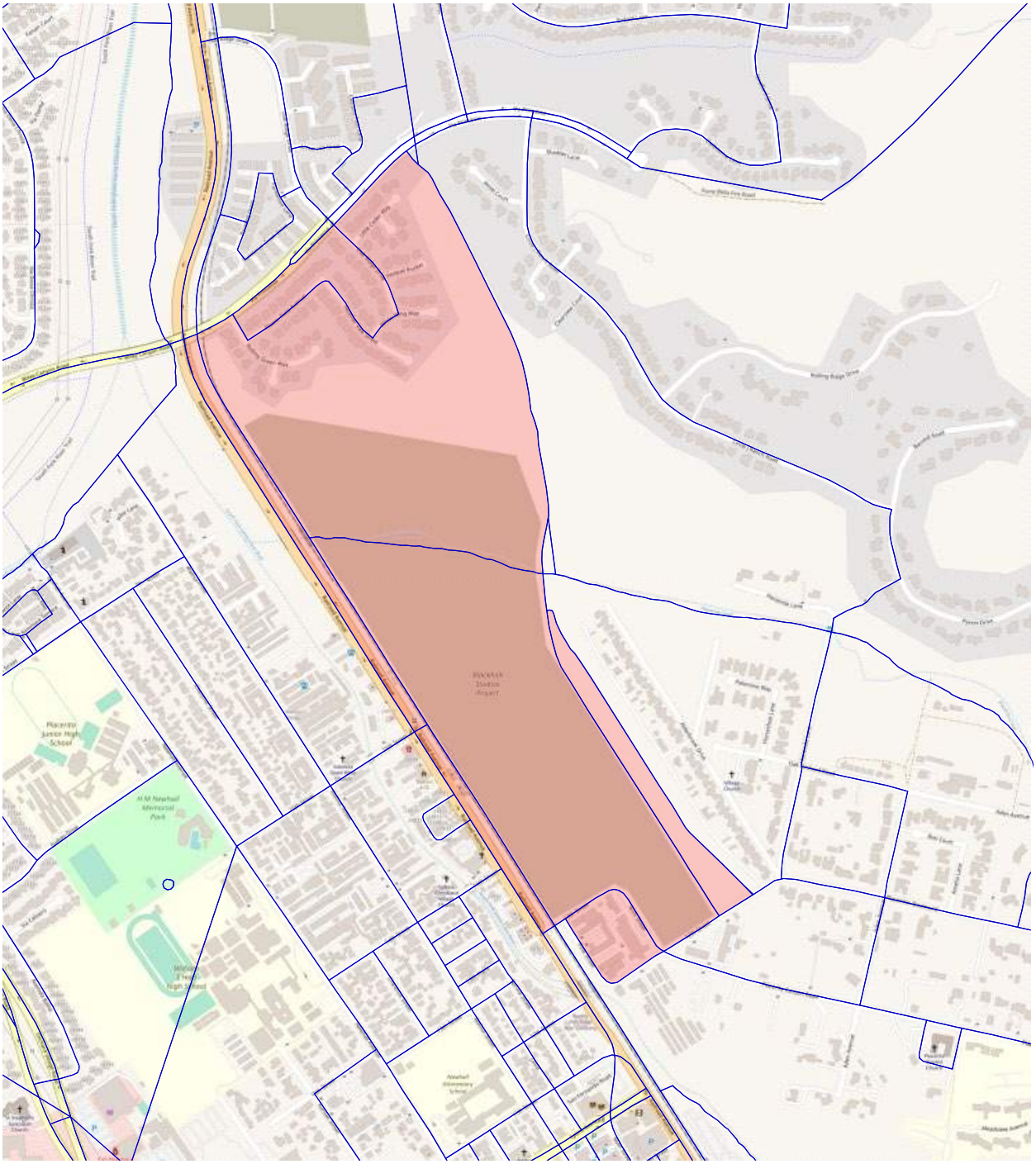
The LODES data include three parts:

- number of workers at the home location,
- number of jobs at the workplace location, and
- flows of workers from home location to workplace location.

[2] https://scag.ca.gov/sites/main/files/file-attachments/scag_rtdm_2012modelvalidation.pdf?1605571641 , p. 5-6 – 5-7.
[3] https://scag.ca.gov/sites/main/files/file-attachments/validationsummaryreport_20rtp_final_2020_05.pdf?1659028273, p. 5-3.

Focusing on workers commuting to the area of Santa Clarita mapped in Figure 3, Figures 4 shows current[4] home locations from the LODES data.

Figure 3: Project Area Used in LODES Mapping

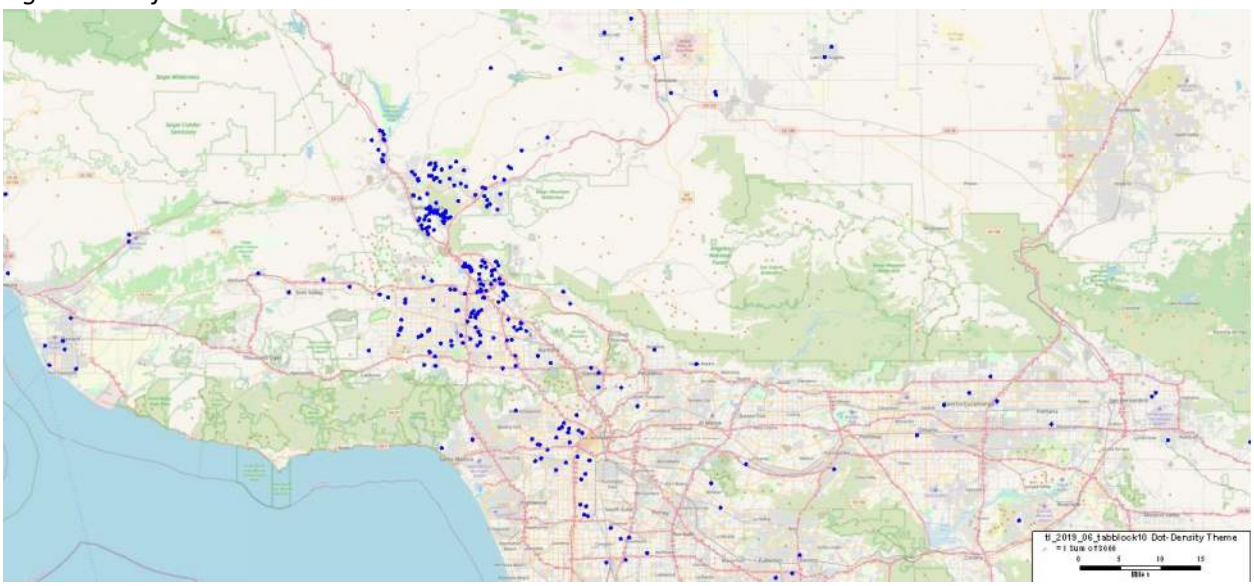


Note: the blue lines delineate Census blocks.

O6-64
Continued

[4] 2019 data used to avoid pandemic effects.

Figure 4: Project Area Workers' Home Locations[5]



O6-64
Continued

While there is a cluster of workers with short commutes, the residences of project area workers are spread widely across southern California. After subtracting out LODES trips that appear to be longer than 100 miles – some of which may errors and could skew the average too high – the mean distance between home and work for project area workers is 19.6 miles.[6] Several adjustments must be made to compare this to the model estimate of home-based VMT per worker. First, this is a one-way distance which needs to be doubled for round trips. Second, it a is a straight-line "as crows fly" distance and the road distances are longer. On the other hand, some commuters carpool and not all commutes are by auto. Based on my experience, I make the following adjustments to the LODES average trip distance:

- converting one-way to two-way x 2.0
- converting from straight-line to road distance x 1.1
- adjustment for carpooling, transit, walking and biking x 0.9.

The resulting average is 38.7 VMT per worker per day, on average. This is more than 2.8 times the 14.0 VMT per day the DEIR estimates.

There is no evidence that the outdated regional model with a base year of 2012 accurately represents commute trip lengths to the project area, and the model estimates are refuted by Census data. Therefore, it is irresponsible to rely on the model to claim that the project will not have significant VMT impacts. More accurate VMT estimates should be prepared based on Census data.

[5] LODES data (https://lehd.ces.census.gov/data/) mapped at the Census Tract level.
[6] Straight line distance calculated from the center of the home Census Block to the center of the work Census Block using Geographic Information Systems ("GIS") software.

The Project's Scale and Characteristics Require Special Attention to Commute VMT

The DEIR estimates that the project would create about 2,333 direct jobs, which exceeds SCAG's forecast of 1,931 additional jobs from 2022-2026 for the entire city (DEIR pg. 4.12-1, Table 4.12-1). Many of these jobs would not represent permanent workers but instead be workers attached to temporary projects including many independent contractors as well as many employed by offsite businesses. This is inherently different from a large warehouse project or large retail project where permanent workers would include a large proportion of local workers.

O6-65

The temporary workers at this site would be drawn from the large Los Angeles County labor force employed in the film and video industry. Therefore, it is possible that commuters to this project would commute longer distances, on average, than those currently commuting to in the project area. The project submittal should include a thorough analysis of the likely composition of the workforce and compute realistic commute distances based on Census data.

The VMT Impacts Require Mitigation But Most Workers Would Commute to the Project by Single-Occupant Auto

The proposed project is not in a VMT-efficient location and may induce unusually long commutes given the characteristics of the project. Therefore, mitigating VMT impacts is essential. The DEIR includes all the usual language on VMT reduction, but these usual measures will not result in significant VMT mitigation in this case.

The DEIR states:

> Project amenities, such as bicycle parking spaces and proximity to multiple public transit options, would reduce anticipated transportation fuel use by encouraging alternative modes of transportation. (DEIR, p. 4.5-11)

O6-66

Few of the workers will live close enough to the project for walking or bicycling to be realistic alternatives.

The transit options listed in the DEIR focus on the "Jan Heidt Newhall Metrolink Station, which is approximately 0.5 mile south of the Project Site, or a 10-minute walk" (DEIR, p. 4-5-11) that also includes connecting bus routes. The bus routes would serve some of the relatively few workers living in Santa Clarita, and Metrolink service could serve some workers from Lancaster and Palmdale with one-hour weekday peak period, peak direction headways. However, it would be almost worthless for reverse commuters from the south where most of the industry's labor force resides. The last two weekday southbound departures from the Newhall station are at 4:29 p.m. and 7:29 p.m., i.e., 3 hours apart.[7]

The DEIR includes the same sort of Transportation Demand Management (TDM) verbiage that is in almost every California project DEIR, but this language is disconnected from the realities of the proposed project. The programs listed in the DEIR include:

- Flexible work schedules and telecommuting programs,
- Carpool programs and support, and,
- Tenant-based guaranteed ride home (GRH) program. (DEIR, p. 4.14-12)

[7] https://metrolinktrains.com/schedules/?type=line&lineName=Antelope+Valley+Line

In the proposed project – who is providing these benefits? Is it the overall project owner, those who lease particular soundstages, short-term sound stage renters, or the businesses who employ the workers? What benefits do independent contractors get and how are they provided? How are these TDM provisions enforced? How do "flexible work schedules" relate to the open-ended nature of film and video shoots in the soundstages? Are workers able to quit work at a certain time to catch their bus while shooting continues? The DEIR does not answer these questions.

O6-66 Continued

The Project's GHG Impacts Also are Underestimated in the DEIR

The projects GHG impacts are calculated using CalEEMod and are documented in DEIR Appendix C. Mobile emissions are estimated based on the number of trips times trip distance, i.e., VMT.

The number of trips used in CalEEMod, 7021.82 (DEIR App. C, p. 109 of 242), is lower than the number of trips in the transportation analysis, 7,293 (App. L, p. 34). The CalEEMod analysis should be redone with the correct trip generation number.

O6-67

The trip lengths assumed in CalEEMod are too low. A default home-based work trip length of 16.6 miles was assumed, i.e., a round trip of 33.2 miles. Although 33.2 miles is much greater than the 14.0 miles asserted in the VMT section of the DEIR, it is lower than the 38.7 miles estimated from Census data for the existing commuting to the project area After proper estimation of commute lengths, these lengths should be used in redoing the CalEEMod analysis.

Sincerely,

Norman L. Marshall

Resume

NORMAN L. MARSHALL, PRESIDENT

nmarshall@smartmobility.com

EDUCATION:

Master of Science in Engineering Sciences, Dartmouth College, Hanover, NH, 1982
Bachelor of Science in Mathematics, Worcester Polytechnic Institute, Worcester, MA, 1977

PROFESSIONAL EXPERIENCE: (32 Years, 18 at Smart Mobility, Inc.)

Norm Marshall helped found Smart Mobility, Inc. in 2001. Prior to this, he was at RSG for 14 years where he developed a national practice in travel demand modeling. He specializes in analyzing the relationships between the built environment and travel behavior and doing planning that coordinates multi-modal transportation with land use and community needs.

Regional Land Use/Transportation Scenario Planning

Portland Area Comprehensive Transportation System (PACTS) – the Portland Maine Metropolitan Planning Organization. Updating regional travel demand model with new data (including AirSage), adding a truck model, and multiclass assignment including differentiation between cash toll and transponder payments.

Loudoun County Virginia Dynamic Traffic Assignment – Enhanced subarea travel demand model to include Dynamic Traffic Assignment (Cube). Model being used to better understand impacts of roadway expansion on induced travel.

Vermont Agency of Transportation-Enhanced statewide travel demand model to evaluate travel impacts of closures and delays resulting from severe storm events. Model uses innovate Monte Carlo simulations process to account for combinations of failures.

California Air Resources Board – Led team including the University of California in $250k project that reviewed the ability of the new generation of regional activity-based models and land use models to accurately account for greenhouse gas emissions from alternative scenarios including more compact walkable land use and roadway pricing. This work included hands-on testing of the most complex travel demand models in use in the U.S. today.

Climate Plan (California statewide) – Assisted large coalition of groups in reviewing and participating in the target setting process required by Senate Bill 375 and administered by the California Air Resources Board to reduce future greenhouse gas emissions through land use measures and other regional initiatives.

Chittenden County (2060 Land use and Transportation Vision Burlington Vermont region) – led extensive public visioning project as part of MPO's long-range transportation plan update.

Flagstaff Metropolitan Planning Organization – Implemented walk, transit and bike models within regional travel demand model. The bike model includes skimming bike networks including on-road and off-road bicycle facilities with a bike level of service established for each segment.

Chicago Metropolis Plan and Chicago Metropolis Freight Plan (6-county region)— developed alternative transportation scenarios, made enhancements in the regional travel demand model, and used the enhanced

model to evaluate alternative scenarios including development of alternative regional transit concepts. Developed multi-class assignment model and used it to analyze freight alternatives including congestion pricing and other peak shifting strategies.

Municipal Planning

City of Grand Rapids – Michigan Street Corridor – developed peak period subarea model including non-motorized trips based on urban form. Model is being used to develop traffic volumes for several alternatives that are being additional analyzed using the City's Synchro model

City of Omaha - Modified regional travel demand model to properly account for non-motorized trips, transit trips and shorter auto trips that would result from more compact mixed-use development. Scenarios with different roadway, transit, and land use alternatives were modeled.

City of Dublin (Columbus region) – Modified regional travel demand model to properly account for non-motorized trips and shorter auto trips that would result from more compact mixed-use development. The model was applied in analyses for a new downtown to be constructed in the Bridge Street corridor on both sides of an historic village center.

City of Portland, Maine – Implemented model improvements that better account for non-motorized trips and interactions between land use and transportation and applied the enhanced model to two subarea studies.

City of Honolulu – Kaka'ako Transit Oriented Development (TOD) – applied regional travel demand model in estimating impacts of proposed TOD including estimating internal trip capture.

City of Burlington (Vermont) Transportation Plan – Led team that developing Transportation Plan focused on supporting increased population and employment without increases in traffic by focusing investments and policies on transit, walking, biking and Transportation Demand Management.

Transit Planning

Regional Transportation Authority (Chicago) and Chicago Metropolis 2020 – evaluated alternative 2020 and 2030 system-wide transit scenarios including deterioration and enhance/expand under alternative land use and energy pricing assumptions in support of initiatives for increased public funding.

Capital Metropolitan Transportation Authority (Austin, TX) Transit Vision – analyzed the regional effects of implementing the transit vision in concert with an aggressive transit-oriented development plan developed by Calthorpe Associates. Transit vision includes commuter rail and BRT.

Bus Rapid Transit for Northern Virginia HOT Lanes (Breakthrough Technologies, Inc and Environmental Defense.) – analyzed alternative Bus Rapid Transit (BRT) strategies for proposed privately-developing High Occupancy Toll lanes on I-95 and I-495 (Capital Beltway) including different service alternatives (point-to-point services, trunk lines intersecting connecting routes at in-line stations, and hybrid).

Roadway Corridor Planning

I-30 Little Rock Arkansas – Developed enhanced version of regional travel demand model that integrates TransCAD with open source Dynamic Traffic Assignment (DTA) software, and used to model I-30 alternatives. Freeway bottlenecks are modeled much more accurately than in the base TransCAD model.

South Evacuation Lifeline (SELL) – In work for the South Carolina Coastal Conservation League, used Dynamic Travel Assignment (DTA) to estimate evaluation times with different transportation alternatives in coastal South Caroline including a new proposed freeway.

Hudson River Crossing Study (Capital District Transportation Committee and NYSDOT) – Analyzing long term capacity needs for Hudson River bridges which a special focus on the I-90 Patroon Island Bridge where a microsimulation VISSIM model was developed and applied.

PUBLICATIONS AND PRESENTATIONS (partial list)

DTA Love: Co-leader of workshop on Dynamic Traffic Assignment at the June 2019 Transportation Research Board Planning Applications Conference.

Forecasting the Impossible: The Status Quo of Estimating Traffic Flows with Static Traffic Assignment and the Future of Dynamic Traffic Assignment. *Research in Transportation Business and Management* 2018.

Assessing Freeway Expansion Projects with Regional Dynamic Traffic Assignment. Presented at the August 2018 Transportation Research Board Tools of the Trade Conference on Transportation Planning for Small and Medium Sized Communities.

Vermont Statewide Resilience Modeling. With Joseph Segale, James Sullivan and Roy Schiff. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

Assessing Freeway Expansion Projects with Regional Dynamic Traffic Assignment. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

Pre-Destination Choice Walk Mode Choice Modeling. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

A Statistical Model of Regional Traffic Congestion in the United States, presented at the 2016 Annual Meeting of the Transportation Research Board.

MEMBERSHIPS/AFFILIATIONS

Associate Member, Transportation Research Board (TRB)

Member and Co-Leader Project for Transportation Modeling Reform, Congress for the New Urbanism (CNU)

EXHIBIT E

LETTER O6 Continued

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
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520 CAPITOL MALL, SUITE 350
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KEVIN T. CARMICHAEL
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KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

April 27, 2023

Via Email and U.S. Mail

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
Santa Clarita, CA 91335
mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for *Immediate Access* to Documents Referenced or Relied Upon in the Draft Environmental Impact Report - Shadowbox Studios Project ((Master Case 21-109)

Dear Mr. Crawford, Ms. Cusick, and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to request any and all documents referenced or relied upon in the Draft Environmental Impact Report for the Shadowbox Studios Project ("Project") (Master Case No. 21-109) proposed by L.A. Railroad 93, LLC ("Applicant"). *This request excludes a copy of the DEIR and its appendices. This request also excludes any documents that are currently available on the City of Santa Clarita website, as of today's date.* O6-68

The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and approximately 37,500-square feet of catering and specialty service areas.

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The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north (APNs: 2834-001-007; 2834-001-012 to -015; 2834-002-046; 2834-003-044; 2834-004-045; 2834-005-041; 2834-006-041; 2834-007-045; 2834-008-039; 2834-010-043; 2834-011-021; 2834-012-023; 2834-013-041; 2834-014-043; 2834-015-021; 2834-016-041; 2834-017-021; 2834-020-111; 2834-020-114; 2834-021-134; 2834-022-067).

O6-68
Continued

Our request for all documents referenced or relied upon in the DEIR is made pursuant to the California Environmental Quality Act (CEQA"), which requires that all documents referenced, and incorporated by reference, in an environmental review document be made available to the public for the entire comment period.[1]

We request ***immediate access*** to review the above documents pursuant to CEQA. If the requested documents are in electronic format, please send them via a file hosting service such as Dropbox. If the electronic documents are 10 MB or less (or can be easily broken into chunks of 10 MB or less), please email them to ssannadan@adamsbroadwell.com as attachments. Otherwise, please send the above requested items by U.S. Mail to our South San Francisco Office as follows:

U.S. Mail
Sheila M. Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Email
ssannadan@adamsbroadwell.com

[1] *See* Pub. Resources Code, § 21092, subd. (b)(1); 14 Cal. Code Regs. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

If you have any questions, please contact me at the email address above or leave me a message and (650) 589-160 and I will return your call promptly. Thank you for your assistance with this matter.

Sincerely,

Sheila M. Sannadan
Legal Assistant

SMS:ljl

EXHIBIT F

LETTER O6 Continued

From: City of Santa Clarita Online Request System
To: Sheila M. Sannadan
Subject: RSC Online: Message About Request # 6883162 [3336353632333734]
Date: Monday, May 8, 2023 4:55:49 PM

---If replying by email, please enter your response above this line---

Dear Ms. Sannadan:

The City is in receipt of your public records request. In reviewing your request, you are seeking numerous separate and distinct records. Under the provision of Government Code 7922.535(b), staff requires additional time to fully and appropriately respond to your public records request. Therefore, pursuant to the extension provision, you will be contacted on or before May 22, 2023, with the availability of the records responsive and appropriate for disclosure.

Please contact Machelle Massey, Project Technician, at (661) 284-1426 should you have any questions.

O6-69

This message is in reference to the Request you submitted on 04/28/2023 07:30 AM regarding
We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to request any and all documents referenced or relied upon in the Draft Environmental Impact Report for the Shadowbox Studios Project (â€œProjectâ€) (Master Case No. 21-109) proposed by L.A. Railroad 93, LLC (â€œApplicantâ€). This request excludes a copy of the DEIR and its appendices. This request also excludes any documents that are currently available on the City of Santa Clarita website, as of todayâ€™s date.

Our request for all documents referenced or relied upon in the DEIR is made pursuant to the California Environmental Quality Act (CEQAâ€), which requires that all documents referenced, and incorporated by reference, in an environmental review document be made available to the public for the entire comment period.

To send a response, please reply to this email or you may view this request online at:

http://user.govoutreach.com/santaclarita/case.php?id=6883162&access=3336353632333734

EXHIBIT G

ADAMS BROADWELL JOSEPH & CARDOZO
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rfranco@adamsbroadwell.com

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RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 12, 2023

VIA EMAIL AND OVERNIGHT MAIL

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
Santa Clarita, CA 91335
mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents

Dear Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to respectfully request that the City of Santa Clarita ("City") extend by at least 30 days the public review and comment period for the Draft Environmental Impact Report ("DEIR") prepared for the Shadowbox Studios Project (Master Case 21-109) ("Project"), which currently ends on May 22, 2023.

We are requesting an extension due to the City's failure to provide timely access to all documents referenced in the DEIR. We ask that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its

O6-70

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air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

On April 27, 2023, our office submitted a request, pursuant to the California Environmental Quality Act ("CEQA"),[1] for immediate access to any and all *documents referenced or relied upon in the Draft Environmental Impact Report*, excluding the DEIR, its appendices and documents available on the City of Santa Clarita website as of that date.[2] CEQA's section 21092(b)(1) and CEQA Guidelines section 15087(c)(5) require that "all documents referenced" and "all documents incorporated by reference" in an environmental impact report shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[3]

O6-70
Continued

On May 8, 2023, the City responded that it was "in receipt of your public records request," and that because the request involved numerous separate and distinct records, the City claimed an extension pursuant to Government Code section 7922.535(b) to provide the missing documents. The City stated that "pursuant to the extension provision, you will be contacted on or before May 22, 2023, with the availability of the records responsive and appropriate for disclosure."

As an initial matter, our April 27, 2023 request was made pursuant to the provisions of CEQA, not the California Public Records Act.[4] Therefore, the extension provision cited by the City (Government Code section 7922.535(b)) is inapplicable.

Moreover, CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[5] The courts have held that the failure to provide even a few pages

[1] Pub. Resources Code §§ 21000 *et seq*.
[2] Letter to Jason Crawford and Erika Iverson, City of Santa Clarita from Sheila Sannadan, Adams Broadwell Joseph & Cardozo re: Request for Immediate Access to Documents Referenced in the Draft Environmental Impact Report – Shadowbox Studios Project (Master Case 21-109) (April 27, 2023).
[3] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5).
[4] Government Code §§ 7920.000, *et seq*.
[5] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[6] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[7]

By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City is depriving members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project and is violating the procedural mandates of CEQA. The City's suggestion that it will not make documents referenced in the DEIR available for our review until May 22, 2023—the last day to submit comments on the Project—plainly violates CEQA and would preclude any meaningful public review and comment. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR by at least 30 days from the date on which the City releases ***all*** the DEIR reference documents for public review.

O6-70
Continued

Given the short time before the current public review and comment period ends, please contact me as soon as possible with your response to this request, but no later than close of business on **Monday, May 15, 2023**. Thank you for your consideration and prompt response to this request.

Sincerely,

Richard M. Franco

RMF:acp

[6] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[7] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

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EXHIBIT H

LETTER O6 Continued

From:	Jason Crawford
To:	Alisha C. Pember; Mary Cusick; Erika Iverson
Cc:	Richard M. Franco; Sheila M. Sannadan; Patrick Leclair; Berger, Karl H.
Subject:	RE: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents
Date:	Friday, May 12, 2023 9:29:13 AM
Attachments:	6644-003acp - Shadowbox studios follow up DEIR ref document request.pdf

Thank you for your email. This is to confirm it has been received and will be included with the item for consideration of the Planning Commission at the 5/16 meeting.

_____

Jason Crawford
Director of Community Development
City of Santa Clarita
Phone: (661) 255-4969

From: Alisha C. Pember <apember@adamsbroadwell.com>
Sent: Friday, May 12, 2023 9:13 AM
To: Jason Crawford <JCRAWFORD@santa-clarita.com>; Mary Cusick <MCUSICK@santa-clarita.com>; Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Richard M. Franco <rfranco@adamsbroadwell.com>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Subject: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Good morning,

Please find attached correspondence re **Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents**.

O6-71

A hard copy will be sent out today via overnight delivery.

If you have any questions, please contact Richard Franco.

Thank you.

Alisha Pember

Alisha C. Pember
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
(650) 589-1660 voice, Ext. 24

LETTER O6 Continued

apember@adamsbroadwell.com

_____

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EXHIBIT I

ADAMS BROADWELL JOSEPH & CARDOZO
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RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

April 27, 2023

Via Email and U.S. Mail

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
Santa Clarita, CA 91335
mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for Mailed Notice of Actions and Hearings Related to Shadowbox Studios Project (Master-Case No. 21-109) (APNs 2834-001-007; 2834-001-012 to -015; 2834-002-046; 2834-003-044; 2834-004-045; 2834-005-041; 2834-006-041; 2834-007-045; 2834-008-039; 2834-010-043; 2834-011-021; 2834-012-023; 2834-013-041; 2834-014-043; 2834-015-021; 2834-016-041; 2834-017-021; 2834-020-111; 2834-020-114; 2834-021-134; 2834-022-067).

Dear Mr. Crawford, Ms. Cusick, and Ms. Iverson:

We are writing on behalf of Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") to request mailed notice of the availability of any environmental review document, prepared pursuant to the California Environmental Quality Act, related to the Shadowbox Studios Project ("Project") proposed by L.A. Railroad 93, LLC ("Applicant").

O6-72

The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and

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approximately 37,500-square feet of catering and specialty service areas. The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north.

O6-72
Continued

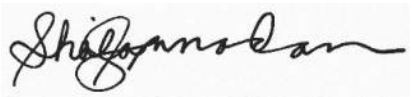
We also request mailed notice of any and all hearings, meetings and/or actions related to the Project. These requests are made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108, 21152, and 21167(f), and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send the above requested items by email and U.S. Mail to our South San Francisco Office as follows:

U.S. Mail
Sheila M. Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd. Suite 1000
South San Francisco, CA 94080-7037

Email
ssannadan@adamsbroadwell.com

Sincerely,



Sheila M. Sannadan
Legal Assistant

SMS:ljl

EXHIBIT J

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
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TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 16, 2023

Via Email and Hand Delivery

Chair Renee Berlin
Members of the Planning Commission
City of Santa Clarita
23920 Valencia Blvd., Suite 140
Santa Clarita, CA 91355

Jason Crawford, Director of
Community Development
Erika Iverson, Associate Planner
City of Santa Clarita
23920 Valencia Blvd., Suite 302
Santa Clarita, CA 91355
Email: Jcrawford@santa-clarita.com; Eiverson@santa-clarita.com

Re: Agenda Item #1- May 16, 2023 Planning Commission Hearing on Shadowbox Studios Project (Master Case 21-109)

Dear Chair Berlin, Honorable Planning Commission members, Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") with respect to the May 17, 2023 Planning Commission Agenda Item #1, the Shadowbox Studios Project (Master Case 21-109) ("Project") proposed by L.A. Railroad 93, LLC ("Applicant"). The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and approximately 37,500-square feet of catering and specialty service areas. The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north. O6-73

The staff report for the May 16 hearing recommends that the Planning Commission take the following actions: (1) receive the staff presentation in response to Planning Commission direction; (2) continue the public hearing to receive

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testimony from the applicant and the public; (3) close the public hearing and provide direction to staff on the hearing schedule; and (4) continue the Project to June 20, 2023. For the reasons set forth below, it is premature for the Planning Commission to act on the Project or to set dates for decisional hearings because the public comment period on the Project's Draft Environmental Impact Report ("DEIR") remains open, and the City must review and respond to comments on the DEIR before moving forward with any Project approval actions. CREED LA respectfully requests that the Planning Commission direct City staff to extend the public comment period for the Project's Draft Environmental Impact Report ("DEIR") and continue the public hearing to a date after the close of public comment on the DEIR.

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the City of Los Angeles.

O6-73
Continued

Individual members of CREED LA and its member organizations live, work, recreate, and raise their families in the City of Santa Clarita and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist onsite.

In addition, CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

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II. THE PLANNING COMMISSION SHOULD CONTINUE THE HEARING AND EXTEND THE PUBLIC COMMENT PERIOD ON THE DEIR DUE TO FAILURE TO COMPLY WITH CEQA

CREED LA is in the process of reviewing the Project's DEIR with its experts and plans to submit legal and technical comments prior to the close of the public comment period, which currently ends on May 22, 2023. Based on our review of the DEIR and available supporting documents, it appears that the DEIR fails to comply with the requirements of the California Environmental Quality Act[1] ("CEQA") as it fails to disclose, analyze and mitigate all of the Project's potentially significant impacts, including impacts on air quality, greenhouse gas emissions, biological resources, noise, and transportation.

Any Planning Commission action on the Project, including the proposed recommendations to close the public hearing and set dates for decisional hearings, is premature at this time because the public comment period on the DEIR remains open. CREED LA and other members of the public have yet to provide substantive comments on the DEIR, and the City must review and address those comments before closing public comment and conducting Project approval hearings.[2] Revision and recirculation of the DEIR may also be required prior to release of a Final EIR and any hearings on the Project.[3] Accordingly, CREED LA respectfully requests that the Planning Commission defer any action on the Project and continue the public hearing to a date after the close of public comment on the DEIR.

O6-73
Continued

In addition, we request that the City extend the public review and comment period for the DEIR on the grounds that the City failed to make available all of the documents referenced in and relied upon by the DEIR during the entire public comment period, in violation of CEQA. We first submitted a request for access to such documents pursuant to CEQA on April 27, 2023.[4] On May 8, the City responded that "you will be contacted on or before May 22, 2023 [i.e., the last day to submit public comments on the DEIR], with the availability of the records responsive and appropriate for disclosure."

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[1] Pub. Resources Code, §§ 21000 et seq.; 14 Cal. Code Regs. ("C.C.R") §§ 15000 et seq.
[2] 14 C.C.R. § 15088 (b) (written responses to public comments on a DEIR must include disposition of significant environmental issues raised in comments, including any revisions to the proposed project to mitigate anticipated impacts or objections).
[3] Pub. Resources Code § 21092.1; 14 C.C.R. § 15088.5.
[4] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Immediate Access to Documents Referenced or Relied Upon in the Draft Environmental Impact Report-Shadowbox Studios Project.

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On May 12, 2023, we requested that the City extend the public comment period as the City had not provided access to all of the DEIR reference documents.[5] We reiterate that request here, and note that there are at least two additional pending requests for an extension of the DEIR comment period.[6] CREED LA's request is made pursuant to CEQA, which requires that "all documents referenced in the draft environmental impact report or negative declaration" be available for review and "readily accessible" during the entire comment period.[7]

Our May 12 request for extension of time included a demand that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

O6-73
Continued

Without access to these critical DEIR reference documents during the entire public comment period, CREED LA and other members of the public have been precluded from having a meaningful opportunity to comment on the DEIR as required by CEQA. Without access to these documents, CREED LA and other members of the public have been unable to evaluate the accuracy of the City's impact analysis, or the efficacy of the City's proposed mitigation measures.

CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[8] The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional

[5] May 12, 2023 letter from Richard M. Franco, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project.
[6] City of Santa Clarita Planning Commission Agenda Report, pg. 14.
[7] PRC §§ 21092(b)(1) (emphasis added); 14 Cal. Code Regs. ("CCR") § 15087(c)(5).
[8] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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public comment.[9] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[10]

On May 15, 2023, the City produced a number of the DEIR reference documents requested, with only a week remaining in the DEIR public comment period. This belated production deprived CREED LA of timely access to the documents, and does not cure the City's failure to make these documents available during the entire public comment period. By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City has denied CREED LA and members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project in violation of CEQA's procedural mandates. Even with the belated document production, the size of the DEIR and the Project's complexity make it difficult to effectively review and comment on the DEIR by the current comment deadline of May 22, 2023. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR to at least June 14, 2023, which is 30 days after the date on which the City released the missing DEIR reference documents for public review.

O6-73
Continued

Finally, we note that CREED LA did not receive formal notice of the May 16, 2023 Planning Commission hearing, despite our express written request for such notice. On April 27, 2023, we sent a letter via email and U.S. Mail to the City Clerk and the Director of Community Development requesting "**mailed notice of any and all hearings, meetings and/or actions related to the Project.** [emphasis in original]"[11] The letter noted that these requests were made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108, 21152, and 21167(f), and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. We only learned of the May 16 hearing by chance, in an email by Director Crawford in response to our May 12 letter requesting an extension of the DEIR public comment period. We hereby reiterate our request for mailed and emailed notice of any and all hearings, meetings and/or actions related to the Project.

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[9] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[10] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
[11] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Mailed Notice of Actions and Hearings Related to Shadowbox Studios Project.

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III. CONCLUSION

For the foregoing reasons, CREED LA requests that the Planning Commission defer any consideration of the Project and the DEIR, extend the DEIR public review and comment period, and continue the public hearing to a date after the close of the public review and comment period. O6-73 Continued

Thank you for your consideration of these comments.

Sincerely,

Richard M. Franco

RMF:acp

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Letter No. O6

Richard Franco
Coalition for Responsible Equitable Economic Development in Los Angeles
c/o Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Response to Comment No. O6-1

This introductory comment states that the letter is written on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) and provides a summary description of the Project. Note that the square footages stated in the comment differ from the square footages provided on page 2.0-1 in Section 2.0, Project Description, of the Draft EIR, which are as follows:

> "…approximately 475,500 square feet of sound stages; approximately 565,400 square feet of workshops, warehouses, and support uses; approximately 209,300 square feet of production and administrative offices; and approximately 35,600 square feet of catering and other specialty services."

The comment does not address the adequacy of the Draft EIR. Accordingly, the comment and discrepancies are noted, and no additional response is warranted.

Response to Comment No. O6-2

The comment claims that the Draft EIR failed to comply with CEQA and must be revised because it did not adequately analyze and disclose many of the Project's significant environmental impacts and failed to propose feasible and enforceable mitigation measures to reduce impacts to a less-than-significant level. The comment also claims that there is substantial evidence that the Project will result in significant unmitigated impacts related to air quality, health risks, noise, biological resources, transportation and greenhouse gas (GHG) emissions. Specific issues raised in the comment related to these environmental topics are addressed in Response to Comment Nos. O6-7 through O6-67 below. As demonstrated therein, the Draft EIR fully complied with all of CEQA's mandates, and the comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-3

The comment references the comments on the Draft EIR provided by James Clark with Clark and Associates related to air quality, Ani Toncheva with Wilson Ihrig related to noise, Shawn Smallwood related to biological resources, and Norman Marshall with Smart Mobility related to transportation and states that the City must respond to such comments separately and fully. Responses to comments provided by Mr. Clark, Ms. Toncheva, Mr. Smallwood, and Mr. Marshall are provided in Response to Comment Nos. O6-27 through O6-67 below.

Response to Comment No. O6-4

The comment provides a description of CREED LA and its purpose and claims that CREED LA members would be directly affected by the Project's environmental and health and safety impacts. This claim is not supported by substantial evidence. As demonstrated in the Draft EIR and further

explained in Response to Comment Nos. O6-7 through O6-67 below, the Project would not result in significant environmental or health and safety impacts. This comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-5

The comment provides the commenter's understanding of the legal background of CEQA. This comment does not raise any issues related to the content or adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-6

Please refer to Response to Comment No. O2-2 regarding the request for access to all documents referenced in the Draft EIR.

Response to Comment No. O6-7

The comment states that the Draft EIR's description of baseline conditions for biological resources is deficient for several reasons. First, the biological survey performed by Rincon Consultants, Inc. (Rincon) was incomplete and not fully documented because it lacked crucial information, such as when the survey began and its duration. The comment questions whether the 23 species of vertebrate wildlife detected by Rincon were representative of actual site conditions because the report was missing the context of start time and duration. To demonstrate the importance of context, the comment notes that Dr. Smallwood's associate detected nearly twice this number of vertebrate wildlife in 3.5 hours. The commenter acknowledges that Rincon reported that 23 additional wildlife species were detected during separate surveys for burrowing owl and California gnatcatcher, but those additional sightings were not included in the Draft EIR.

The biological surveys performed by Rincon were intended to assess current conditions of the Project Site for potentially supporting sensitive biological resources (e.g., special-status species, aquatic resources, sensitive habitats and vegetation, and wildlife movement). Based on the results of the initial habitat assessment, focused surveys were performed for specific special-status species determined to have the potential to occur based on the distribution and quality of the vegetation and associated habitats on-site, such as for western burrowing owl and coastal California gnatcatcher. The species referenced in this comment are common and are not "special status" in accordance with CEQA. Additionally, the discrepancy between the number of species observed by Rincon during the reconnaissance survey on January 20, 2022, and the number observed by Dr. Smallwood's associate on May 14, 2023, can be attributed to seasonal variability. Furthermore, information on the additional species observed by Rincon is provided in the Appendix D of the Draft EIR (see Table 2 of the Burrowing Owl Habitat Assessment and Focused Survey Results for the Blackhall Studios Project [Burrowing Owl Report] and Appendix A of the Blackhall Property Project Coastal California Gnatcatcher Focused Survey Report [Coastal California Gnatcatcher Report], both of which were included in Appendix D of the Draft EIR).

Response to Comment No. O6-8

The comment states that the focused detection surveys for burrowing owl and California gnatcatcher performed by Rincon failed to comply with minimum standards of the available survey protocols for these species.

Focused surveys were completed by a qualified biologist with over 20 years of experience and an active U.S. Fish and Wildlife Service (USFWS) permit in compliance with USFWS Section 10(a) of the Federal Endangered Species Act (FESA), Special Terms and Conditions for Endangered and Threatened Wildlife Species Permit. The survey included six breeding season surveys in accordance with the USFWS current Coastal California Gnatcatcher Presence/Absence Survey Protocol. According to the USFWS, the protocol for the breeding season was designed to provide a 95-percent confidence level of detecting coastal California gnatcatchers at a site when they are present. The accepted standard for protocol presence/absence surveys for coastal California gnatcatcher is either six breeding season surveys or nine non-breeding season surveys; USFWS does not require completion of both breeding and non-breeding season surveys for the results to be considered valid. Furthermore, the potential habitat on the Project Site for supporting coastal California gnatcatcher is of marginal quality, in addition to the site being generally surrounding by existing development and urban sprawl and relatively fragmented from suitable habitat for coastal California gnatcatcher. Accordingly, conducting additional surveys during the non-breeding season (July 1 through March 14) is not necessary.

With regards to burrowing owl, the comment states that the burrowing owl surveys failed to meet nearly half of the applicable California Department of Fish and Wildlife (CDFW) survey and reporting protocols. Rincon performed four breeding season surveys in accordance with the requirements specified in CDFW's Staff Report on Burrowing Owl Mitigation.[17] This included a habitat assessment, focused burrow survey, and focused breeding season owl surveys by systematically searching for potential foraging and nesting habitat within the study area, which included the Project Site plus a 150-meter buffer (where access was available). The surveys were conducted by a qualified biologist with experience and knowledge of burrowing owl life history and sign walking transects spaced approximately 10 meters apart in suitable habitat and were appropriately adjusted to allow for 100-percent visual coverage of the ground surface. Suitable habitat was identified by the presence of low vegetation cover, presence of potentially suitable small mammal burrows, and perch sites. As indicated in the Draft EIR and the Burrowing Owl Report (included in Appendix D of the Draft EIR), no evidence of burrowing owl presence (e.g., direct observations or sign of presence, such as feathers, pellets, tracks, or potentially occupied burrows) was observed during the breeding season surveys.

Based on the above, the surveys for the coastal California gnatcatchers and burrowing owls comply with established protocols for each species and, thus, with the requirements of CEQA as well. As such, the comment's claim that the Draft EIR did not provide substantial evidence to support the findings related to the coastal California gnatcatchers and burrowing owls is incorrect.

Response to Comment No. O6-9

The comment states that an important part of documenting a site's environmental setting is a desktop review, which includes literature and database review and consultation with local experts to inform and augment reconnaissance surveys and to help determine which protocol-level detection surveys should be conducted. The comment suggests that the Draft EIR's desktop review is incomplete and flawed because it neglected readily available species occurrence databases and provided no evidence that any local experts were consulted. The comment indicates that Dr. Smallwood conducted an independent database review and the various Project

[17] State of California Natural Resource Agency, Department of Fish and Game, Staff Report on Burrowing Owl Mitigation, March 7, 2021.

Site visits, which resulted in the identification of 122 special status wildlife species occurring near enough to the Project Site to warrant analysis of their occurrence potential.

However, the comment does not mention which of the 122 species they believe could potentially occur on the Project Site. Rather, the list of species presented in Table 4 of Dr. Smallwood's report identifies those species that occur "In region" "Nearby", "Very close", and "On site". Of the 122 species included in Dr. Smallwood's Table 4 identified as "On site", all are common in the region and non-listed species that include Allen's hummingbird, turkey vulture, red-tailed hawk, Cooper's hawk, California thrasher, and Southern California rufous-crowned sparrow. With the exception of Allen's hummingbird, all of these species were documented in the Biological Assessment Report (included in Appendix D of the Draft EIR). Additionally, many of the 122 species included in Mr. Smallwood's report that are not included in the Draft EIR are derived from unconfirmed sources in eBird (https://eBird.org) and iNaturalist (https://www.inaturalist.org) and include species that require habitat that is not present on, or in the vicinity of, the Project Site. Examples include numerous coastal species, such as Laughing gull, Heermann's gull, western gull, willet, long-billed curlew, whimbrel, California least tern, gull-billed tern, black tern, American white pelican, and California brown pelican, as well as species that are dependent on perennial water sources, such as lakes and ocean, including least bittern, common loon, double-breasted cormorant, white-faced ibis, and osprey. Mr. Smallwood incorrectly alleges that some of these species are "Nearby", which is unsubstantiated and inaccurate.

As indicated in the Draft EIR and the Biological Resources Assessment Report (included in Appendix D of the Draft EIR), the majority of the Project Site consists of non-native wild oat-annual brome grassland. In addition to other disturbed areas on the Project Site, off-highway vehicle trails and other disturbances (e.g., encampments and trash) on the site are evident in the native vegetation communities that are present. Moreover, the Project Site is generally fragmented from intact native habitats in the region and surrounded by development and urban sprawl. Finally, the database reviews performed by Rincon were standard and appropriate for performing Project-level analysis under CEQA. These resources included queries of the USFWS Information for Planning and Consultation online project planning tool (2022), USFWS Planning and Conservation System (2022), CDFW California Natural Diversity Database (2022), and the California Native Plant Society Online Inventory of Rare, Threatened and Endangered Plants of California (2022) to obtain comprehensive information regarding state- and federally-listed species, as well as other special-status species considered to have potential to occur within a 9-USGS quadrangle map search area that included the *Newhall, California* USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles (*Whitaker Peak, Warm Springs Mountain, Green Valley, Val Verde, Mint Canyon, Santa Susana, Oat Mountain, and San Fernando*). In addition, the following resources were reviewed for information about the Project Site:

- Aerial photographs (Google Earth Pro 2022)
- *Newhall, California* USGS 7.5-minute topographic quadrangle
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey
- USFWS Critical Habitat Portal

- USFWS National Wetland Inventory (NWI)
- United States Geological Survey (USGS) National Hydrography Dataset (NHD)

The aforementioned resources are intended to provide a list of special-status species that have been recorded in the region and were accompanied by field assessments performed by qualified biologists, including several focused wildlife and plant surveys performed between 2015 and 2022 in accordance with agency standards. Mitigation Measures MM-BIO-1, MM-BIO-2, and MM-BIO-3 adequately mitigate the Project's potential impact on those species with potential to occur on the Project Site to a less than significant level.

Response to Comment No. O6-10

The comment provides a summary statement that the Draft EIR must be revised to provide accurate baseline information about the Project Site's environmental setting with respect to biological resources to allow for an accurate impact analysis and mitigation plan for the Project. Responses related to the establishment of an accurate baseline for the purposes of evaluating biological resources under CEQA are provided in Response to Comment Nos. O6-7 through O6-9 above. As demonstrated therein, the biological resources assessment identified accurate baseline information about the Project Site's environmental setting, which allowed for an accurate impact analysis and mitigation plan for the Project. The comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-11

The comment states that an EIR must fully disclose all potentially significant impacts of a project and implement all feasible mitigation to reduce those impacts to a less-than-significant level. The comment goes on to discuss the need for supporting documentation and compliance with CEQA requirements in the analysis. The comment then concludes with a statement that courts will not arbitrarily rule on the side of studies presented in a certified EIR. The comment provides background information on CEQA requirements and court actions but does not address the environmental impacts of the Project or the contents of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-12

The comment alleges that the Draft EIR failed to adequately disclose and mitigate the Project's significant air quality impacts, claiming that it improperly applied mitigation measures as PDFs, and, therefore, significant emissions were not reported or sufficiently mitigated. The comment also states that the PDFs were not enforceable as part of the Project as they were not incorporated as mitigation. Response to Comment No. O5-5 details the validity of the use of PDFs with respect to the construction equipment. As detailed in Response to Comment No. O5-5, the PDFs, which specify the use of Tier 3 equipment at a minimum, do not result in a meaningfully different emissions than the application of the default construction equipment fleet in CalEEMod. With or without the PDFs that require a minimum of Tier 3 equipment, Project emissions would be below the South Coast AQMD thresholds of significance and, therefore, less than significant.

Response to Comment No. O6-13

The commenter claims that the Draft EIR failed to adequately address health risk impacts on nearby sensitive receptors by failing to conduct a construction or operational health risk assessment (HRA). Response to Comment No. A3-6 addresses the need for an operational HRA. However, as detailed therein, no operational HRA is warranted.

Similarly, a construction HRA is not necessary based on State and local toxic air contaminant (TAC) regulations and methodologies. The South Coast AQMD's CEQA Handbook[18] does not recommend preparing HRAs to determine the human health risk associated with the construction of land use projects, and the South Coast AQMD has not provided any guidance on how to apply existing health risk guidelines, including the 2015 Office of Environmental Health Hazards Assessment (OEHHA) Risk Assessment Guidelines Guidance Manual, to construction activities.[19]

The South Coast AQMD's rules and guidance with respect to the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (South Coast AQMD Rules and Regulations XIV – Toxics and Other Non-Criteria Pollutants, Rules 1401, and 1402, and OEHHA's guidance manuals), were provided to guide the preparation of HRAs for stationary and certain mobile sources, such as truck movement and idling, ship hoteling at ports, and train idling. This limits the guidance and documents relevant to HRAs and CEQA analysis for non-stationary source land use projects to these specific mobile source land use types. The rules and guidelines promulgated by the South Coast AQMD do not require HRAs to be prepared as part of CEQA documents that evaluate construction and operation of development projects similar to the Project. Additionally, the South Coast AQMD adopted recommendations for the siting of new sensitive land uses near potential sources of air toxics and of siting new sources near sensitive receptors that are similar to those recommended by the California Air Resources Board (CARB) in their Air Quality and Land Use Handbook.[20] CARB's 2005 Handbook recommends siting distances with respect to new sensitive land uses near potential sources of air toxic emissions, such as freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities, but does not include construction activities as part of the Handbook sources.

OEHHA, in conjunction with CARB and the California Air Pollution Control Officers Association (CAPCOA), has adopted guidance manuals for use in implementing the Air Toxics Hot Spots Program as part of the Hot Spots Act (California Health and Safety Code Section 44360 et. seq.). The intent of the guidance manuals is to provide HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of new or modified stationary sources,[21,22] such as industrial-type uses, that emit TACs and are regulated by air districts. Examples of stationary sources include various product manufacturing (e.g., food, chemical, material, etc.), stationary diesel engines (e.g., emergency backup generators), metal finishing/manufacturing, chrome plating facilities, and refineries.[23] The guidance manuals are not meant to be used for a health risk

[18] South Coast Air Quality Management District (SCAQMD), CEQA Air Quality Handbook, April 1993 (revised November 1993).

[19] Office of Environmental Health Hazards Assessment, Air toxics Hot Spots Program – Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015.

[20] California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

[21] Office of Environmental Health Hazards Assessment, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, 2003.

[22] Office of Environmental Health Hazards Assessment, Air toxics Hot Spots Program – Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015.

[23] California Air Resources Board, Risk Management Guidance for Stationary Sources of Air Toxics, July 23, 2015.

evaluation of typical non-stationary source land use projects. For these reasons, the Project is not subject to regulation under the Hot Spots Act, the OEHHA 2003 Guidance Manual, or 2015 Guidance Manual.[24,25]

The South Coast AQMD's 10 in 1 million cancer risk threshold and the hazard index threshold of 1 were developed for the emissions of TACs from stationary sources. These thresholds were based on the health risks associated with elevated exposure to TAC compounds from these types of stationary sources. The South Coast AQMD has not identified an appropriate threshold for the assessment of health risk related to construction activities. Further, OEHHA does not include CEQA significance thresholds applicable to construction activities or the operation of non-stationary source projects in their guidance manuals.

The CAPCOA provides lead agencies with guidance of when and how an HRA should be prepared in its guidance document, entitled Health Risk Assessments for Proposed Land Use Projects (CAPCOA HRA Guidance).[26] The CAPCOA HRA Guidance does not provide guidance on how HRAs for construction projects should be addressed in CEQA. It only recommends HRAs related to two types of land use projects—land use projects with toxic emissions impacts and land use projects that would place receptors in the vicinity of existing toxics sources. The Project does not meet either of these criteria as it does not include (1) industrial uses, (2) the use of an unpermitted stationary source, or (3) a residential development. Additionally, the Project would not generate more than 100 heavy-duty truck trips per day or more than 40 truck trips operating transport refrigeration units.[27] This, coupled with the South Coast AQMD not recommending HRAs for construction in any of its CEQA guidance materials, demonstrates why an HRA is not required to be prepared with respect to construction activities.

With regard to the Project's emissions from generators and the resulting potential health risks, as explained in Response to Comment Nos. A3-3 and A3-4, subsequent to the initial analysis, it has been determined that no generators would be included as part of the base Project. Generators, as needed, would be brought on-site by individual productions and would need to be permitted through the South Coast AQMD. As part of the permitting process, the risk associated with the generators would be required to be below regulatory thresholds. See Response to Comment Nos. A3-3, A3-4, and A3-6 for additional information. As demonstrated therein, the Draft EIR adequately disclosed the health risks from exposure to DPM. The comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR.

Response to Comment No. O6-14

The comment claims that the construction noise analysis conclusion of less-than-significant impact is faulty because it relies on the fact that construction noise levels are temporary and would comply with the provisions in the City's Noise Ordinance. The comment explains that a substantial temporary increase in ambient noise is a significant impact and asserts that the Draft EIR's conclusion that construction noise would comply with the City's Noise Ordinance is incorrect

[24] Office of Environmental Health Hazards Assessment, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, 2003.
[25] Office of Environmental Health Hazards Assessment, Air toxics Hot Spots Program – Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015.
[26] California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, July 2009.
[27] California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

because the predicted noise levels would exceed the City's daytime limit of 65 dBA for residential receptors.

The comment asserts that the Draft EIR's noise analysis should have used the daytime 65-dBA limit for residential zones specified in the City's Noise Ordinance (SCMC Section 11.44.040). Section 3.18, Noise, in the City of Santa Clarita One Valley One Vision (General Plan) EIR, explicitly states that construction noise is exempt from the noise limits specified in SCMC Section 11.44.040 if it is performed in accordance with the hours in stated in Section 11.44.080.[28] The summary of SCMC Section 11.44.080 reiterates that construction noise is exempt from Section 11.44.040 and adds that construction noise is exempt also from SCMC Section 11.44.070.[29] In the absence of adopted City noise limits for construction noise, Rincon appropriately utilized the Federal Transit Administration's (FTA) threshold of 80 dBA L_{eq} for an 8-hour period or when construction is conducted outside the allowable hours for construction, as stated in SCMC Section 11.44.080. This FTA threshold is a commonly used threshold in CEQA analyses and is based upon knowledge of an expert federal agency. According to the FTA, "local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project."[30] Therefore, the noise limits in SCMC Section 11.44.040, including the tonal adjustments, would not apply to the construction noise levels generated by the Project. Moreover, although the comment makes reference to 5 dB as clearly discernable and 10 dB as a doubling of sound perceived by most people, the comment does not recommend an increase above ambient noise levels that would be appropriate to use as a threshold.

The comment cites legal cases where courts have invalidated EIRs for relying on improper noise standards and failing to analyze the impacts of noise increases. In the most recent court case, *King & Gardiner Farms, LLC v. County of Kern*, the court does not explicitly require an analysis of an increase over ambient noise. Rather, the court's contention is that the lead agency did not properly support its use of an absolute threshold over the use of an ambient noise increase threshold. There is substantial evidence to support the use of an absolute threshold as the basis of an analysis, as described below:

- This approach is consistent with many jurisdictions within the State, including, as limited examples, the cities of Beverly Hills, Fresno, and Pasadena, and Caltrans, which do not have a threshold for a numeric increase in ambient noise levels.[31]
- Construction hours for the FTA threshold are within the hours permitted by City of Santa Clarita Noise Ordinance. Potential human health impacts from construction noise include hearing loss and sleep disruption; Project construction would avoid sleep disruption by complying with ordinance-allowed hours.

[28] City of Santa Clarita, One Valley One Vision Draft Program EIR, 2010, Section 3.18, Noise, p. 3.18-25. See Footnote 12.
[29] City of Santa Clarita, One Valley One Vision Draft Program EIR, 2010, Section 3.18, Noise, p. 3.18-26. See Footnote 14.
[30] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018, Section 7.1, p. 179.
[31] City of Beverly Hills Municipal Code Section 5-1-205; City of Fresno Municipal Code Section 10-109; City of Pasadena Municipal Code Chapter 9.36.07; Caltrans Traffic Noise Analysis Protocol Chapter 3.2, April 2022.

- Health impacts during the daytime would include hearing loss, which per OSHA/CalOSHA, can begin to occur 90 dBA L_{eq} (8-hour); the FTA absolute threshold would be well below this limit.[32]
- Noise metrics such as L_{DN} and CNEL support this concept with the penalized hours occurring outside of the allowed construction hours.

Although the increase in ambient noise levels would be noticeable from construction, the absolute threshold approach recognizes the suburban environment of the City and that daytime construction activities can occur (i.e., it is not expected that daytime activities would affect people sleeping). Potential human health impacts (e.g., hearing loss) are addressed by the absolute threshold, which is best for evaluating potential noise impacts during daytime hours over an extended period, as this metric better reflects potential health impacts. Increases in ambient noise levels resulting from construction activities outside of the allowed construction hours in SCMC Section 11.44.080 would be considered significant because sleep disruption would occur during nighttime hours.

As demonstrated above, the Draft EIR used appropriate thresholds to analyze noise impacts from the Project. The comment incorrectly claims that "noise studies that rely on a single measure that excludes possible significant impacts from noise increases or noise extremes do not receive deference by reviewing courts." As demonstrated above, the courts allow for a lead agency to use absolute thresholds with proper support. Accordingly, revisions to the Draft EIR to compare construction noise levels with the noise ordinance's limits for general noise sources and evaluate increased ambient noise levels attributable to Project construction and operation are not warranted.

Response to Comment No. O6-15

The comment claims that the City has failed to analyze the operational noise impacts of the Project using an ambient-based threshold. Regarding an operational ambient noise threshold, the significance of the magnitude of an ambient noise level increase is inherently accounted for by the City's fixed noise limits utilized for the noise analysis in the Draft EIR. The fixed noise limits used in this analysis to evaluate the Project's operational noise are set at reasonable levels at which a substantial noise level increase, as compared to ambient noise levels, would occur. The noise limits used to analyze Project operational noise levels are lower than the FTA threshold discussed above that was used to analyze Project construction noise levels, which accounts for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and would not affect sleep. In addition, the City's noise limits are lower for nighttime hours to account for the differences in ambient noise levels during daytime hours as compared to nighttime hours. Furthermore, the operational noise thresholds used in the analysis inherently integrate the ambient noise level since the City's noise limits are tailored to specific land uses. The City's operational noise limits are stricter for residential land uses as compared to commercial or industrial land uses because of the typically lower ambient noise levels associated with residential land uses. Therefore, these absolute noise limits account for typical ambient noise levels associated with each land use such that an increase in ambient noise levels that exceeds

[32] OSHA, Standard 1910.95 – Occupation noise exposure.

these limits would be considered a substantial increase above ambient noise levels. Regardless, at the residences to the east of the Project (NM4 and NM4 in Table 4.11 in Section 4.11, Noise, of the Draft EIR), modeled noise levels from 40 dBA to 47 dBA did not exceed the measured ambient noise levels of 47 dBA and 49 dBA in this area. Modeled noise levels of 47 dBA to the north of the Project Site did not exceed an increase of 5 dBA over ambient levels at the residence to the northwest (NM1 in Table 4.11-1). Furthermore, modeled noise levels were below the 35-dBA noise contour and, therefore, well below ambient levels at the residences to the north and northeast (NM2 and NM3 in Table 4.11-1), and modeled noise levels of 44 dBA to the west of the Project Site were well below the measured noise level of 70 dBA (NM5 in Table 4.11-1).

The comment questions the effectiveness of the concrete wall depicted in the Draft EIR, stating that the presence of holes in the wall may reduce its noise reduction capabilities. Regarding the perimeter wall, the Project would install a solid wall. What may appear to be holes in Figure 4.11-3 of the Draft EIR are stylistic indentions of the wall. Therefore, the SoundPLAN model did not overestimate the attenuation from the perimeter wall.

The comment claims that the Draft EIR lacked reference level details used in the SoundPLAN model and a complete narrative of the Project's operational activities and schedule. The Draft EIR provided a summary of operational noise-generating activities, such as arrival and departure of vehicles, limited vehicle idling, vehicle door closing, passenger conversations, and vehicle startup. These activities were included in the parking lot noise levels modeled in SoundPLAN, The parking lot source that was used in SoundPLAN is referred to in the model as "LFU Bayern 2007" with an input type of "visitors and staff." These noise levels are based on an extensive noise study conducted by the Bavarian State Office for the Environment that determined how to calculate noise emissions from parking areas.[33] The Draft EIR also described outdoor areas that would generate noise, including the picnic areas, break areas, patios, food truck areas, and the private park, which are primarily shielded from the adjacent residences by the Project's buildings (e.g., the catering buildings would serve as a buffer between the residences and the private park, and the break areas and patios have been integrated along the buildings' façades facing inward and away from sensitive receptors). The comment does not specify other noise-generating activities that should be described in detail and/or included in the modeling. Exact scheduling details of future operational activities are unknown at this stage of planning; accordingly, the modeling conservatively assumed that mechanical equipment and parking lot activity noise would occur throughout the day and night to reflect the potential for noise levels at all hours.

The comment further states that the reference levels from the cut sheets provided in the Noise and Vibration Study (Appendix J of the Draft EIR) were not used in the SoundPLAN model according to Ms. Toncheva. The specific example cited in the comment is the HVAC unit on page 142 of the Noise and Vibration Study, which would generate a sound pressure level of 77 dBA at 10 feet. The SoundPLAN model includes nine different HVAC units, shown in Table 6 of the Noise and Vibration Study. The spectrum for these units shown in the table were input into the SoundPLAN model; thus, the operational noise contours are reflective of the unit's noise levels using the most accurate noise data provided by the manufacturer. In a 3D noise model, there are additional dynamics, such as attenuation due to the rooftop angles and reflections, that a basic distance attenuation calculation would not convey. It should also be noted that the SoundPLAN

[33] Bayerisches Landesamt für Umwelt, Parking Area Noise, Recommendations for the Calculation of Sound Emissions of Parking Areas, Motorcar Centers and Bus Stations as well as of Multi-Storey Car Parks and Underground Car Parks (6. Revised Edition), 2007.

model conservatively did not include rooftop screening of the HVAC units and, thus, likely overestimated noise levels generated by the HVAC units. In addition, the exhaust noise levels are provided in Table 6 of the Noise and Vibration Study. Given the aforementioned, the assumptions used in the SoundPLAN model were complete.

The comment asserts that a CEQA document cannot rely on "hidden" studies or documents that are not provided to the public, and, therefore, the Draft EIR's conclusions regarding the operational noise impacts of the Project lacked substantial evidence. However, as discussed above, the Draft EIR did not rely on "hidden" studies or documents; substantial evidence was included in the Draft EIR and the Noise and Vibration Study included as Appendix J of the Draft EIR.

Accordingly, as demonstrated above, the comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-16

The comment states that the Draft EIR fails to analyze potentially significant impacts to wildlife, that the analysis of cumulative impacts to wildlife is inadequate, and that the mitigation measures in the Draft EIR are inadequate to address the Project's significant impacts to biological resources. The comment claims that the Draft EIR omits any analysis of impacts on wildlife habitat, such as habitat loss and fragmentation.

Section 4.3, Biological Resources, of the Draft EIR includes a detailed analysis of the Project's potential impact on wildlife and wildlife habitat in accordance with CEQA Guidelines Appendix G, Thresholds 4.3(a), 4.3(b), and 4.3(d). The Project's potential cumulative impact on biological resources is summarized in Subsection 4.3.7 in Section 4.3, Biological Resources. Most of the vegetation on the Project Site is non-native, consisting of non-native wild oat-annual brome grassland, and much of the site has been disturbed by off-highway vehicle trails and other disturbances (e.g., encampments and trash), including within the native vegetation communities. The comment suggests that the Project would contribute further to habitat fragmentation by the loss of one of the region's last patches of undeveloped open space; however, based on review of aerial imagery, the Project Site is isolated and already fragmented from intact native habitats in the region and is surrounded by development.

The comment states that their independent biologist predicts the loss of 1,924 bird nests as a result of the Project's development. This prediction is not supported by any rationale that considers the current state of the Project Site and the condition habitat for nesting birds. For example, the majority of the Project Site consists of low-growing herbaceous vegetation, and few bird species in the region are ground nesters that would nest in this habitat, such as mourning dove (*Zenaida macroura*) and killdeer (*Charadrius vociferus*). Therefore, few bird nests are expected to occur within the non-native grassland areas of the Project Site that would be disturbed. The oak trees and native vegetation on the Project Site provide habitat for nesting birds but are not expansive when considering the amount of area that is covered by native plants/suitable bird nesting habitat. It is expected that birds currently nest within the trees and shrubs that would be disturbed by the Project but not nearly the amount alleged in the comment (estimated by Rincon's professional biologists to be likely less than 5 percent of the 1,924 nests predicted in the comment). The comment suggests that the Draft EIR lacked "any" analysis and

mitigation for loss of nesting bird habitat. Federal and State regulations, including the federal Migratory Bird Treaty Act of 1918 and the California Department of Fish and Game Code, prohibit a project from impacting an active bird nest. Therefore, Mitigation Measure MM-BIO-3 presented in Section 4.3, Biological Resources, of the Draft EIR includes avoidance of bird nests during construction activities. Furthermore, the majority of the native habitat on-site occurs within and along Placerita Creek, which would largely be preserved in place by the Project. Of the 5.39 acres of sensitive natural communities on the Project Site, only 1.392 acres would be permanently impacted, with 0.57 acre temporarily impacted during construction. Mitigation Measure MM-BIO-4 further requires restoration/replacement of this habitat at a minimum 1:1 ratio, thereby further reducing the Project's long-term impacts on habitat and its use by wildlife.

Response to Comment No. O6-17

The comment states that the Draft EIR seemed to analyze whether the Project would interfere substantially with the movement of any wildlife species or with established wildlife corridors but only addressed interference with wildlife corridors and ignored interference with movement of wildlife species. The Project Site represents a relatively small amount of undeveloped space in the vicinity and the region. Not only does most of the Project Site consist of non-native grassland, but it is isolated and already fragmented from intact native habitats in the region and is surrounded by development that limits opportunities for wildlife movement, both locally and regionally. The comment alleges that the Project would cut off such wildlife from one of the last remaining stopover and staging opportunities in the Project area, forcing ever increasing travel between remaining stopover sites. However, this statement is inaccurate, especially when considering the large tracts of open space to the north and east of the Project Site, including the Quigley Canyon Open Space located approximately one mile to the east and the Angeles National Forest just east of SR-14.

Lastly, the comment suggests that the Project could result in traffic-caused wildlife mortality and bird mortality from window collisions. Although the Project would increase vehicle trips, vehicle circulation is generally already high on Railroad Avenue immediately to the west of the Project Site, as well as on Wiley Canyon Road to the north and Lyons Avenue to the south. The Project Site is not within a local or regional wildlife movement corridor, and wildlife are not expected to travel through the Project Site and across Railroad Avenue because of the development that currently exists immediately to the west. Therefore, wildlife collisions along Railroad Avenue immediately to the west of the Project Site are currently low and would be expected to remain low during the operation of the Project due to the vast amount of development that currently exists. In addition, the Project Site is not located within a local or regional bird migration corridor or flyway, and the Project would not introduce significant barriers or windows in the vicinity when considering the vast amount of existing development that is in the immediate vicinity and throughout the City. The scale and type of building construction proposed on site is similar to multiple other commercial and business park developments in the Project vicinity and throughout the Santa Clarita Valley, none of which have resulted in significant bird strike issues. Potential Project impacts to birds due to window collisions would not be significant given the extensive existing development surrounding the Project Site. The incorporation of alternative types of glass or alternative window layouts as suggested in the comment is not necessary to mitigate Project impacts to biological resources; therefore, incorporation of this recommendation in the Draft EIR is not required under CEQA. However, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-18

The comment states that the Draft EIR lacked an adequate analysis of the Project's cumulative impacts on wildlife and references certain sections of the CEQA Guidelines that provide guidance on how to analyze cumulative impacts. However, the comment does not identify any potentially significant cumulative impacts to which the Project could contribute. As analyzed in Subsection 4.7.3 in Section 4.3, Biological Resources, of the Draft EIR, the Project would not cause a considerable contribution to any significant cumulative impacts on biological resources. The discussion in the analysis expressed that impacts on biological resources are typically analyzed on a project-by-project basis, acknowledging that impacts on biological resources are often specific to the Project Site. Nonetheless, the analysis of cumulative impacts on biological resources in Subsection 4.7.3 included a discussion of the potential cumulative impacts of the Project and 36 related projects and concluded that the Project would not considerably contribute to any significant impacts. The comment does not express disagreement with this conclusion or present any evidence to the contrary. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-19

The comment states that the biological resources mitigation measures in the Draft EIR will not reduce the Project's impacts to a level of insignificance. The comment references Mitigation Measures MM-BIO-1, MM-BIO-2, and MM-BIO-3 that are intended to minimize and avoid impacts to special-status wildlife during construction activities. However, the comment states that these mitigation measures would not do anything to prevent further habitat fragmentation, reduce impacts to wildlife caused by Project-generated traffic or window collisions, or lessen the Project's interference with wildlife movement in the region. As indicated in the Response to Comment No. O6-17 above, the Project would not result in significant habitat fragmentation or wildlife mortality caused by Project-generated traffic or window collisions because the Project Site is already fragmented from open space and is surrounded by development. Since such impacts are not significant, no mitigation is required.

The comment indicates that Mitigation Measure MM-BIO-3 incorrectly states the duration of the bird breeding season recognized by CDFW and that pre-construction surveys should be preceded by detection surveys to inform the preconstruction surveys of nesting locations. This comment is based on opinion. The bird nesting season fluctuates based on several factors, such as region, elevation, and seasonal weather conditions. Mitigation Measure MM-BIO-3 indicates that the bird breeding season is generally February 1 to August 31, which is accurate for the region in which the Project is located. Lastly, the comment suggests additional protocol-level detection surveys for burrowing owls, coastal California gnatcatcher, and a suite of special-status species of bats. Protocol surveys for burrowing owl and coastal California gnatcatcher were conducted for the Project, and the results for these species were negative. See the *Burrowing Owl Habitat Assessment and Focused Survey Results for the Blackhall Studios Project, City of Santa Clarita, Los Angeles County, California* dated July 8, 2022, and the *Blackhall Property Project Coastal California Gnatcatcher Focused Survey Report* dated May 26, 2022, both of which were included in Appendix D of the Draft EIR. Moreover, the Project Site does not contain roosting habitat for any bat species.

Response to Comment No. O6-20

The comment claims that the Draft EIR failed to adequately disclose, analyze, and mitigate the Project's transportation impacts and that Mr. Marshall found a number of serious flaws in the VMT analysis.

However, there are several basic flaws in the statements made in the comment and in the attached report by Mr. Marshall. The responses below address the comments in the order as presented in the letter.

The comment claims that the Project's home-based work VMT per employee of 14.0 was compared to an adopted significance threshold of 15.7, and, as a result, the Draft EIR concluded that the Project's VMT impacts were less than significant and required no mitigation. The threshold for the VMT criteria is explained in Appendix C of the Transportation Assessment (Appendix L of the Draft EIR) and again in Footnote [c] of Table 10 in the Transportation Assessment. The threshold of 14.0 work VMT per employee is an interpolation between the citywide threshold of 15.7 for Year 2020 conditions and the projected 11.5 threshold for 2040 conditions. The 14.0 represents the threshold for Year 2028 conditions, which is the Opening Year of the Project. The Draft EIR did not compare the 14.0 work VMT per employee to the 2020 threshold of 15.7 as described in the comment. Table 10 shows that the comparison of 14.0 work VMT per employee calculated for the Project was compared to the calculated 2028 threshold of 14.0 work VMT per employee. Since the Project work VMT per employee does not exceed the threshold work VMT per employee, the Project is found to have no significant VMT impacts, and, therefore, no VMT mitigation is required.

The comment asserts that Mr. Marshall identifies a basic discrepancy in the Draft EIR's analysis that calls into question the VMT modeling results. However, Mr. Marshall's report cited no legitimate flaws in the analysis or conclusions of the VMT analysis and provided no legitimate substantial evidence of a significant VMT impact that requires mitigation. The map showing the location of the Project in a zone that generates above average work VMT per employee generally serves as a guideline that directs further study of individual projects within those various zones. Accordingly, further analysis of the Project's VMT impacts was conducted and included in the Draft EIR. Therefore, there is no inconsistency between the graphic and the analysis results.

The comment claims that Mr. Marshall questions the validity of the Draft EIR's VMT analysis because it was performed using an outdated and unreliable model. The 2016 SCAG model was the model that was used to establish the VMT thresholds in the Santa Clarita area and, therefore, the most logical model to use in the analysis of the Project. The use of this model is consistent with City's *Transportation Analysis Updates in Santa Clarita (TAU)*.

The State CEQA Guidelines for VMT analysis are very careful to point out that when comparing the VMT results of a Project to a threshold target VMT, both the Project analysis and the threshold analysis must be conducted using the same methodology and assumptions in order to have a fair comparison. Consistent with the OPR Technical Advisory, the thresholds of significance established by the TAU are based on the same data used to develop the 2016 SCAG Regional Model. Per the OPR Technical Advisory, in determining potential significant impacts, it is critical to make an "apples-to-apples" comparison between Project-generated VMT and the thresholds of significance. The OPR Technical Advisory states on page 5 that "[m]odels and methodologies used to calculate thresholds, estimate project VMT, and estimate VMT reduction due to mitigation

should be comparable. For example: Where a travel demand model is used to determine thresholds, the same model should also be used to provide trip lengths as part of assessing project VMT." Similarly, the OPR Technical Advisory states on page 30 that "[w]hen using models and tools [for establishing thresholds of significance and estimating VMT reduction attributable to mitigation measures and project alternatives], agencies should use comparable data and methods, in order to set up an 'apples-to-apples' comparison between thresholds, VMT estimates, and VMT mitigation estimates." The City's threshold of significance for work VMT per employee in the City (14.0 work VMT per employee) was established as 15 percent lower than the average work VMT per employee based on the same metrics as used in the model to determine that the Project would generate average work VMT per employee of 14.0. If an alternative data source were to be used to determine Project-related work VMT per employee, it could not be validly compared to the City's established VMT thresholds of significance. The only way a valid comparison could be made would be if that same alternative data methodology were applied to the geographic area of the entire City and used by the City to establish new thresholds of significance. Rather, a key purpose of using the SCAG model is to provide a common basis for both significance thresholds and Project-related VMT analysis, such that localized variations in socio-demographic and built environment factors can be used to compare Project-related VMT to area-wide baseline conditions. Therefore, it is not acceptable to establish the threshold using a regional model and the Project VMT analysis using a methodology based on Census data as described in the comment.

The comment claims that the VMT analysis relied on an outdated model based on data that underestimated commute trip lengths and that it was more accurate to use actual data on commute trips taken from the Census. Mr. Marshall's calculation of 38.7 VMT per worker per day is not consistent with the State's definition of "work VMT per employee". First, work VMT per employee is a one-way trip distance so Mr. Marshall's doubling of his home-to-work distance to get "round trip commutes" automatically gets his estimate to be double what the State threshold calls for. As such, his average of 38.7 VMT per worker per day is not correct, consistent with thresholds established in the TAU, or account for employees that arrive to work via a means other than a single-passenger automobile, such as using transit or carpooling. The work VMT per employee is calculated incorrectly by Mr. Norman by using Census Data and by ignoring carpool passengers and transit/bike/walk trips in his calculation.

The comment claims that the Draft EIR's VMT estimates are inconsistent with the assumptions about Project trip lengths used in the CalEEMod modeling conducted for the Project's GHG impacts analysis. Mr. Marshall points out that the CalEEMod GHG modeling used an average daily traffic level that was 96.3 percent of the daily traffic level used in the Transportation Assessment (7,022 vs. 7,293) but used a home-based work trip length of 16.6 miles (or an inappropriate calculation of 33.2 miles round trip) as compared to a work VMT per employee of 14.0 miles. Again, comparisons are being made incorrectly. The home-to-work distance of 16.6 miles is not the same thing as a work VMT per employee of 14.0 miles because the work VMT per employee includes the consideration of carpools, transit, bike, and walk modes of travel, while the home-to-work distance from the Census Bureau does not. These are not directly comparable numbers and, as such, is inappropriate to suggest otherwise. If both of the daily traffic and the home-to-work numbers were changed in the GHG analyses, the conclusions presented in the Draft EIR would not change. Please see also Response to Comment No. O6-67.

Accordingly, the Draft EIR properly and adequately conducted the Project's VMT analysis. The comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR.

Response to Comment No. O6-21

The comment claims that the Draft EIR failed to adequately disclose, analyze, and mitigate the Project's GHG impacts by not demonstrating compliance with the 2022 Scoping Plan, the SCAG 2020-2045 RTP/SCS, and the City's General Plan. Please refer to Response to Comment Nos. O5-14 through O5-16 for a detailed response to similar comments regarding GHG impacts and the Project's consistency, rather than compliance, with plans.

With respect to the 2022 Scoping Plan, the Draft EIR addressed the Project's compliance with the 2022 Scoping Plan Update in detail on page 4.7-14 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR. As stated therein, the 2022 Scoping Plan strategies that are applicable to the Project include reducing fossil fuel use, energy demand, and VMT; maximizing recycling and diversion from landfills; and increasing water conservation. The Project would reduce fossil fuel usage by providing access to alternative vehicle infrastructure, including constructing a Class I multi-purpose path along the Project frontage on 12th Street, Arch Street, and 13th Street. In addition, the Project would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to provide a link for pedestrians and bicyclists between the Project Site and the Jan Heidt Newhall Metrolink Station and Old Town Newhall dining and entertainment district. The Class I multi-purpose path would be a completely separate right-of-way for the exclusive use of bicyclists and pedestrians with the path visibly marked. The Project also proposes railroad improvements, including installing a bike path/trail on the north side of the crossing and implementing Americans with Disability Act requirements for pedestrians. These would promote the use of non-fossil fuel vehicles due to the safe, easy access to alternative modes of transportation. Additionally, bus stops for Santa Clarita Transit (SCT) Lines 12 and 757 and Antelope Valley Transit Authority (AVTA) Line 790 are located immediately adjacent to the Project Site. The Jan Heidt Newhall Metrolink Station includes a stop provided for the SCT, Amtrak Thruway Bus, and AVTA services.

The Project would be required to comply with the California Building Standards Code (CCR Title 24), as well as the California Green Building Standards (CALGreen) Code (CCR Title 24, Part 11), which requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects, as well as high efficiency plumbing fixtures. Furthermore, the 2022 Building Energy Efficiency standards (CCR Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the California Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance. Specific to lighting, the Project would implement an energy management system that would energize the lighting fixtures to an "on" condition as desired, and "occupancy type step dimming" would provide for the local control of each fixture. The lighting fixture embedded occupancy sensor would provide an automatic reduction of lighting level output (to approximately 37 percent) if there is no movement in the area and maintain this reduced level of lighting until the sensor detects movement. When this occurs, the lighting level would be increased in 3 seconds to 100 percent until movement is no longer detected and then would maintain this 100-percent level for 5 minutes when the light level would ramp down to 37 percent, which would be maintained until future movement is detected and the process is repeated. This minimizes unnecessary lighting, while maintaining security in the area.

In addition, the Project would, at a minimum, provide parking spaces with EV charging stations and parking spaces that would be EV-ready pursuant to the requirements of the CALGreen Code. Furthermore, subject to City and other agency approvals, rooftop photovoltaic (PV) systems and solar panels would be installed for all the sound stage buildings and the support building for localized use. The exact number of EV stations and amount of solar has not been determined and will be based on the CALGreen Code requirements at the time building permits for the Project are approved. This would reduce GHG emissions as Project employees opt for electric vehicles over gasoline vehicles.

The Project would also implement refuse initiatives for recycling and separation of building materials and site-generated solid waste. These initiatives will include a reduction of waste to the landfill by 57 percent through recycling or reuse efforts.

With respect to the 2020-2045 RTP/SCS, the comment states that the Draft EIR omitted key facts that undermined its conclusions. Specifically, the comment claims that since the Project would provide more parking spaces than employees, it does not discourage the use of single occupancy vehicles and that the Project employment would exceed the projected employment growth for the City.

The Project would result in up to 5,833 employees (approximately 2,333 direct employees, which are those that are employed by the base project, and approximately 3,500 indirect, which are those brought on-site by the individual productions leasing space). Given the potential for over 5,000 employees on-site on any given day, the incorporation of 2,684 vehicle spaces does not provide parking for all potential employees that will access the site and, therefore, will necessitate the use of alternate forms of transportation. The comment claims that the Project's projected employment by itself exceeds the SCAG forecast for all jobs in the City of 1,931 jobs by 2026. The comment only takes into account the job growth within the City and not within the County, which is the measure by which compliance with the 2020-2045 RTP/SCS growth assumptions is determined. Regardless, the comment's reference to job growth of 1,931 by 2026 from Section 4.12, Population and Housing, of the Draft EIR is taken out of context. The Demographic and Growth Forecast technical appendix to the 2020-2045 RTP/SCS only projects employment growth for the year 2045, which as detailed in Section 4.2, Air Quality, on page 4.2-18, is expected to be 14,000 by 2045 in the City of Santa Clarita. Section 4.12, Population and Housing, interpolates annual employment growth in the City to provide contextual information; however, the 2020-2045 RTP/SCS is not based on annual employment growth. The employment of the Project would be approximately 5,833 with only 2,333 of those being direct employees of the base project, which is well below the employment growth of 14,000 anticipated by the 2020-2045 RTP/SCS for the City of Santa Clarita. Therefore, the Project would be consistent with the growth assumed in the RTP/SCS.

Further consistency with the RTP/SCS is detailed in Table 4.10 in Section 4.10, Land Use and Planning, of the Draft EIR, starting on page 4.10-10. Accordingly, the following was added to the discussion of the 2020-2045 RTP/SCS in the second to last sentence of the first full paragraph on page 4.7-15 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, to include reference to Section 4.10, Land Use and Planning Section, of the Draft EIR, which provided more detail with respect to Project's consistency with the specific policies of the 2020-2045 RTP/SCS (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> The Project's consistency with the applicable 2020-2045 RTP/SCS strategies is discussed in **Table 4.7-4**, as well as in **Table 4.10-1** in Section 4.10, Land Use and Planning, of this Draft EIR.

In addition, the analysis of the Project's consistency with the policies to support Goal CO 8 of the City's General Plan Conservation and Open Space Element was included in Section 4.10, Land Use and Planning, of the Draft EIR. Furthermore, some of the Project features that would be implemented in compliance with the requirements of Title 24 standards would be more stringent than would be required under the General Plan policies, such energy and water efficiency features.

Based on the discussions provided in Response to Comment Nos. O5-14 through O5-16 and herein, the Project has demonstrated consistency with the 2022 Scoping Plan, the SCAG 2020-2045 RTP/SCS, and the City's General Plan to support its determination of less-than-significant impacts regarding GHG emissions. Accordingly, the Draft EIR properly and adequately analyzed the Project impacts related to GHG emissions. The comment presents no new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR.

Response to Comment No. O6-22

The comment asserts that the Project improperly relied on "proposed" and unenforceable project design features to mitigate the Project's impacts prior to analyzing and disclosing those impacts. As identified in Response to Comment Nos. O5-5, O5-6, O5-9, O5-10, O5-34, and O6-12 above, PDFs are features of the Project that would be included in the construction and operation of the Project that would be implemented above and beyond compliance with specific regulations and requirements.

Regarding PDFs related to geology and soils, it should be noted that each of the discussions of Project impacts under Thresholds 4.6(a) through 4.6(d) determined that the Project's compliance with the requirements of the National Pollutant Discharge Elimination System Construction General Permit, the California Building Code, the Santa Clarita Building Code, and the requirements for issuance of grading permits, impacts to geology and soils would be less than significant. Implementation of the PDFs would further reduce the less-than-significant impacts related to seismically induced groundshaking and soil stability.

Accordingly, the description and inclusion of PDFs in the Draft EIR is not improper, as alleged by the commenter, but rather aids in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss "the measures which are proposed by project proponents to be included in the project."

Response to Comment No. O6-23

The comment asserts that the Project improperly relied on project design features to conclude that the Project's energy impacts are less than significant. Please refer to Response to Comment Nos. O5-5, O5-6, O5-9, O5-10, O5-34, and O6-12 and O6-22 above.

Regarding Project Design Feature PDF-GHG-2, prior to the completion of the Draft EIR, the provision of electric vehicle (EV) charging station and EV-ready parking spaces was identified as Project Design Feature PDF-GHG-1 until the City confirmed that the Project would be required to provide such parking spaces pursuant to CALGreen Code requirements; as such, the provision of such parking

spaces was removed as a PDF, and the provision of rooftop solar became Project Design Feature PDF-GHG-1. This oversight has been corrected in the Draft EIR, as presented below.

- The discussion under Subsection 4.5.5, Project Design Features, in Section 4.5, Energy, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  4.5.5 PROJECT DESIGN FEATURES

  No specific Project Design Features are proposed with respect to energy resources. However, Project Design Feature~~s~~ PDF-GHG-1 ~~and PDF-GHG-2~~ in Section 4.7, Greenhouse Gas Emissions, of this Draft EIR would reduce the Project's energy consumption.

- The last sentence in the first full paragraph after Table 4.5-2 on page 4.5-11 in Section 4.5, Energy, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Moreover, in accordance with Project Design Feature PDF-GHG-1~~2~~, the Project would install rooftop photovoltaic (PV) systems and solar panels for all the sound stage buildings and the support building for localized use, which would exceed California Energy Code standards and reduce the Project's demand on SCE supplies.

- The second to last sentence in the last paragraph on page 4.5-11 in Section 4.5, Energy, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Furthermore, the Project Site would provide EV charging stations and EV-ready parking spaces pursuant to the requirements of the CALGreen Code ~~Project Design Feature PDF-GHG-1~~, which would reduce fuel usage.

- The second sentence under "***State Energy Regulations***" on page 4.5-12 in Section 4.5, Energy, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Furthermore, ~~in accordance with PDF-GHG-1 and PDF-GHG-2,~~ the Project ~~Site~~ would provide EV charging stations and EV-ready parking spaces pursuant to the requirements of the CALGreen Code~~,~~ and install rooftop PV systems and solar panels for all the sound stage buildings and the support building for localized use in accordance with Project Design Feature PDF-GHG-1.

Whether the provision of EV charging stations and EV-ready parking spaces was presented as a PDF or code requirement, their provision would contribute to the reduction in the Project's energy consumption. These changes do not result in the Project creating any new or increased significant environmental impact that is not already identified in the Draft EIR and do not otherwise change the Draft EIR's analysis of impacts related to energy.

Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, correctly identified the installation of rooftop photovoltaic (PV) systems and solar panels as Project Design Feature PDF-GHG-1. It should be noted that this PDF was conservatively not included in the quantification of estimated annual operational emissions presented in Table 4.7-2 on page 4.7-13 of the Draft EIR. However,

the provision of rooftop PV systems and solar panels was taken into account in the analysis of the Project's consistency with the 2022 Scoping Plan and 2020-2045 RTP/SCS in Subsection 4.7.6, Analysis of Project Impacts, in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR.

Response to Comment No. O6-24

The comment asserts that the Project improperly relied on project design features to conclude that the Project's impacts to public services involving the Los Angeles County Fire Department (LACoFD) and Los Angeles County Sheriff's Department (LASD) are less than significant. Please refer to Response to Comment Nos. O5-5, O5-6, O5-9, O5-10, O5-34, and O6-12 and O6-22 above.

In addition, Project Design Feature PDF-PUB-1 addresses LACoFD's comment in response to the Notice of Preparation (NOP) and simply incorporated LACoFD's response in the Project design and, therefore, is not a mitigation measure. Similarly, LASD's comment in response to the NOP recommended incorporation of the principles of Crime Prevention through Environmental Design (CPTED) in the design plans. As stated by LASD in the NOP response letter, the "goal of CPTED is to reduce opportunities for criminal activities by employing physical design features that discourage anti-social behavior, while encouraging the legitimate use of the site. The overall tenets of CPTED include defensible space, territoriality, surveillance, lighting, landscaping, and physical security. The Station recommends installation of security cameras to reduce opportunities for criminal activities." Accordingly, Project Design Features PDF-PUB-2 through PDF-PUB-4 simply incorporated LASD's CPTED recommendation in the Project design and, therefore, are not mitigation measures. As such, the description and inclusion of PDFs in the Draft EIR are not improper, as alleged in the comment, but rather aid in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss "the measures which are proposed by project proponents to be included in the project."

Response to Comment No. O6-25

The comment asserts that the Project improperly used project design features to conclude that the Project's impacts related to wildfire are less than significant. Please refer to Response to Comment Nos. O5-5, O5-6, O5-9, O5-10, O5-34, and O6-12 and O6-22 above.

In addition, the project design features identified in Section 4.17, Wildfire, of the Draft EIR were not used as the basis for determining the level of significance of impacts related to wildfire. More specifically, the impact analysis as to whether the Project would substantially impair an adopted emergency response plan or emergency evacuation plan was based on the results of the traffic evacuation assessment prepared for the Project, which determined that the proposed roadway modifications implemented by the Project would reduce the existing average travel time through the Dockweiler Corridor, and that the City's existing emergency response system, as established in the City's Hazard Management Plan, would be sufficient to address emergency evacuation scenarios in the event of natural or man-made incidents in the Project area that result in a need to evacuate some or all existing residents of the adjacent communities and future Project employees. Project Design Feature PDF-WF-3 simply identified implementation of a Wildfire Education Program to establish an evacuation plan specifically for the Project Site. Similarly, the impact analysis as to whether the Project would expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire or exacerbate fire risk or that may result in temporary or ongoing impacts to the environment was based on the modeling scenarios studied to determine fire behavior on the Project Site under existing and post-

development conditions. The modeling results showed that fire potential on the Project Site would be lower than existing conditions due to fire safety requirements, to which the Project would comply. The fire risk assessment of the Project area also determined that with "the conversion of the existing landscape to ignition-resistant development, wildfires may still encroach upon and drop embers on the site but would not be expected to burn through the site or produce sustainable spot fires due to the lack of available fuels." The fire risk assessment also concluded that the Project "would not facilitate wildfire spread and would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the site's structure, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape." Project Design Features PDF-WF-1 through PDF-WL-4 simply specify the primary provisions of the Project's Fire Protection Plan and are fire protection features that would be implemented by the Project that are above and beyond code requirements. Accordingly, the description and inclusion of PDFs in the Draft EIR are not improper, as alleged in the comment, but rather aid in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss "the measures which are proposed by project proponents to be included in the project."

Response to Comment No. O6-26

The comment asserts that the Draft EIR is wholly inadequate under CEQA and that it must be revised and recirculated. However, as discussed in the responses above, the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. The comment presents no other information or substantial evidence about other any specific impact area that would require substantial changes to the Draft EIR or present any information that meets any of the criteria for recirculation of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-27

The comment provides an introduction to Clark and Associates (Clark) and Clark's review of the materials contained in the Draft EIR. The comment restates the description of the Project. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-28

The comment asserts that the Draft EIR concluded that no mitigation is required to prevent impacts from the Project on air quality in the area and that this conclusion is in conflict with the facts provided within the Draft EIR. There are no specifics identified in this comment to identify what is in conflict. Section 4.2, Air Quality, of the Draft EIR, provided a comprehensive analysis of the Project's potential impacts on air quality and concluded that such impacts are less than significant. The lead agency is unaware of any conflicts between the facts and conclusions presented in the EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-29

The comment alleges that the City failed to perform a quantitative HRA of the impacts of toxic air contaminants emissions from construction of the Project on the nearest sensitive receptors. The comment also provides analysis that contends that the operation of emergency generators would contribute to a substantial health risk to nearby residents. This comment is an expanded version of Comment No. O6-13 above; accordingly, please see Response to Comment No. O6-13 above.

A health risk analysis for operation of the generators is not required as part of the EIR as generators would not be included as part of the base Project. While generators may be brought on-site by individual productions leasing space, those productions would be required to obtain South Coast AQMD permits for such generators, and health risks assessments will be required. As part of the permitting process, the risk associated with the generators would be below the regulatory threshold of 10 in one million in order to receive a permit to operate. Therefore, operation of generators will be regulated to less-than-significant levels.

Response to Comment No. O6-30

The comment claims that the Project failed to require the use of Tier 4 Final technology for off-road diesel equipment. Table 4.2-5 on page 4.2-20 in Section 4.2, Air Quality, of the Draft EIR, presented regional emissions that are below regulatory thresholds with the use of Tier 3 engines. Additionally, Table 4.2-7 on page 4.2-21 showed that localized impacts are below regulatory thresholds with the incorporation of Tier 3 engines. CEQA does not require a project to mitigate to the fullest extent possible but only to mitigate those impacts that are found to be significant without additional reductions. Given the less-than-significant impacts associated with all air quality impacts, there is no need to mitigate and incorporate Tier 4 construction equipment. There is a typographical error in the CalEEMod notations that suggests Tier 4 as a PDF. However, as identified in the Draft EIR, Project Design Features PDF-AQ-1 and PDF-AQ-2 indicated that Tier 3 offroad emissions standards would be used and that Tier 3 equipment was accurately modeled in CalEEMod as shown in the comment. To remove confusion, the typographical error in the CalEEMod notations has been corrected. The following revision was made to the 12th line item/adjustment factors on page 2 of 36 in the CalEEMod Output in Appendix A of the Air Quality and Greenhouse Gas Emissions Study (included in Appendix C of the Draft EIR), as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> Construction Off-road Equipment Mitigation – SCAQMD Rule 403, watering and vehicle speed from Table 1 BACT applicable to all construction activity. Based on applicant information, the construction fleet > 50 HP would be equipped with Tier ~~4~~ 3 engines and level 3 DPF filters

This change does not result in the Project creating any new or increased significant environmental impact that was not already identified in the Draft EIR or meet any of the criteria for recirculation of the Draft EIR.

Response to Comment No. O6-31

The comment claims that the Draft EIR failed to identify all of the sensitive receptors within an 0.25-mile radius of the Project Site. The Draft EIR identified the sensitive receptors within 1,000 feet of the Project Site, which is typical of air quality analysis as pollution and, therefore, impacts dissipate as the distance from the source increases. The comment identified two schools located at 0.3 mile from the Project Site. These schools would be greater than 0.25-mile distance from the Project Site, and, therefore, even by the comment's definition of exclusion zone would not need to be identified. Additionally, at 0.3 mile, individuals at the schools would be subject to less impacts from emissions than those residents closer to the Project Site. Furthermore, using the concentration map from Comment No. O6-29, the schools would be predominantly upwind from the Project Site; as students/staff remain at the schools for less time than the residents located closer to the Project Site, they would be exposed to less pollutants from on-site activities than the adjacent residences.

Therefore, while the schools do not need to be identified in the analysis, if they were, impacts would be less than those identified for the residences that are closer to the Project Site, which the Draft EIR determined are less than significant. Accordingly, the Draft EIR properly and adequately analyzed Project impacts to sensitive receptors within an 0.25-mile radius of the Project Site. As such, no changes to the Draft EIR are necessary based on this comment.

Response to Comment No. O6-32

The comment claims that the analysis of operational emissions in the Draft EIR is incomplete because it failed to include emissions from the fire pump system that would be installed on-site. The Project description does not include a fire pump system as included in the Project. The analysis was conducted based on the description of the Project that was available at the time of analysis, and it has been subsequently confirmed that a fire pump would not be necessary for the Project. Accordingly, the Draft EIR properly and adequately analyzed the Project's operational emissions. As such, no changes to the Draft EIR are necessary based on this comment.

Response to Comment No. O6-33

The comment claims that the emissions reductions provided by the EV charging station calculations do not make sense. The emissions reductions from the EV charging stations take into account VMT reductions based on the potential of 10 hours of operating time per charger and assumes a charge of 25 miles per hour. The analysis also assumes that a single vehicle would not stay at the station all day and includes the State's move toward substantially increasing the EV fleet for private vehicles between now and 2045. The analysis includes the lead agency's best assumptions at energy reduction for the Project due to the inclusion of EV charging stations based on the known Project activities and current industry standards. Regardless, the finding of a less-than-significant impact is based on the Project's consistency with local and State plans and policies for the reduction of GHG emissions and is not based on reaching a specific numeric target of Project emissions. In addition, while the comment claims that the math does not make sense, the comment does not provide any supporting documentation to refute the information provided in the analysis. Therefore, even if the reduction of GHG emissions from EV charging stations were removed from the GHG analysis and the Project identified emissions were accordingly increased from 7,252 MTCO2e to 10,610 MTCO2e, the Project's GHG impacts would still be less than significant because the Project would remain consistent with all of the GHG reduction plans and policies as identified in the Draft EIR. Accordingly, the Draft EIR properly and adequately analyzed the Project's GHG impacts. As such, no changes to the Draft EIR are necessary based on this comment.

Response to Comment No. O6-34

The comment claims that the facts identified and referenced in the comment letter lead to a conclusion that the Project could result in significant impacts and that the Draft EIR should be revised. There are no facts identified in this comment to support this statement as this is a conclusionary statement to summarize the issues identified in the letter. The issues are addressed in Response to Comment Nos. O6-29 through O6-33 above. No further direct response is required for this comment.

Response to Comment No. O6-35

This introductory comment summarizes the Project description and briefly describes Wilson Ihrig, the acoustical consultant, commenting on the Draft EIR noise analysis. The comment does not

address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-36

The comment provides a summary of the health effects of noise. The comment also states that "the health effects of noise are not taken as seriously in the United States as they are in other countries," although this comment is not substantiated. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O6-37

The comment implies that the Draft EIR incorrectly described the Project's construction noise impacts as temporary and references SCMC Chapter 17.67, which addresses temporary uses that last less than one year, such as circuses, carnivals, rodeos, parades, and Christmas tree sales. The use of this chapter of the SCMC is not applicable since it is not related to construction activities. The word "temporary" is subjective and is not beholden to one year or less, as its meaning is essentially "not permanent," which aptly describes a two-year construction period. Agencies, such as Caltrans, describe construction activities as "temporary" in their guidance in statements, such as "although construction activities potentially generate the highest vibration levels and most damage, they are temporary in nature."[34] Caltrans guidance also states that "residents' tolerance toward construction noise is greatly increased if they are informed that the noise is temporary."[35] Therefore, expert State agencies agree that construction noise levels are more tolerable because construction activities are temporary, and the Draft EIR's conclusion in this regard is appropriate.

The comment claims that Draft EIR incorrectly applied an 80-dBA noise threshold based on FTA Transit Noise and Vibration Assessment Criteria, instead of using the noise limits prescribed in the City's Noise Ordinance, and claims that the City's 65-dBA daytime limit in residential zones should apply to Project construction. The comment cites the Draft EIR's predicted 70-dBA construction noise levels and emphasizes that the predicted noise levels would not comply with the City's Noise Ordinance. In addition, the comment suggests that the Project should consider an ambient-based threshold in addition to the City's 65-dBA noise limit to evaluate construction noise impacts. See Response to Comment No. O6-14 for a discussion of the Draft EIR's appropriate use of the FTA threshold in lieu of the City's 65 dBA daytime noise limit and/or an ambient-based threshold.

Regarding the comment about noise measurements including any rail activity, train activity was measured for the first 15 seconds of NM3; as seen in the raw measurement data included in the Noise and Vibration Study, the noise levels from rail at this distance were consistent with ambient noise during the rest of the measurement. No trains were observed during the measurement of NM5; this measurement and the other measurements represent conservative ambient noise levels as they did not capture train activity. Regardless, modeled noise levels at the residences in this area were 44 dBA L_{eq}, which is lower than even the minimum noise level measured at NM5 of 48.9 dBA L_{min}.

[34] California Department of Transportation, Technical Noise Supplement, 2013, p. 7-28.
[35] California Department of Transportation, Technical Noise Supplement, 2013, p. 7-27.

Furthermore, the comment models all construction equipment included in the Draft EIR's air quality report (Appendix C of the Draft EIR) simultaneously at a distance of 200 feet to develop an 83-dBA L_{eq} noise level at the nearest sensitive receptors. Simultaneous operation of eight pieces of construction equipment within close distance is not a realistic construction scenario; while such pieces of equipment may be on the full 93-acre Project Site, equipment use is typically operated in groups of two or three on different parts of the site. FTA guidance recommends the use of a distance variable that "assume[s] that all equipment operates at the center of the project" in the construction noise calculation when modeling all construction equipment in one phase.[36] Applying this FTA guidance to Project's noise modeling would result in a distance of approximately 500 feet to the nearest sensitive receptors, which is a more fair distance metric to use if modeling all eight construction equipment forecasted to operate on the 93-acre Project Site. At 500 feet, the construction equipment would result in a noise level of 68 dBA L_{eq} (8-hour), well below the FTA's 80-dBA L_{eq} (8-hour) threshold. See Response to Comment No. O6-14 for a discussion of the validity of the 80-dBA FTA threshold.

It should also be noted that the construction noise levels provided in Table 1 of the comment letter appear to be overestimated. The table lists a "tractor/loader/backhoe" as a row of Project construction equipment, as this is how CalEEMod lists these pieces of equipment in one grouping. In other words, if a project has one tractor and one loader, it will appear in CalEEMod as two equipment under "tractor/loader/backhoe." The comment appears to have assumed this meant two tractors, two loaders, and two backhoes, which is incorrect and erroneously estimated a noise level of 73 dBA at 200 feet from these pieces of equipment. These types of equipment are separate in the Roadway Construction Noise Model (RCNM) and have different noise levels. Assuming two tractors (the loudest of the three), noise levels from that equipment would be 71 dBA at 200 feet. Further, in the last paragraph before Table 1, the comment references the grading noise level as 77 dBA at 200 feet and the noise level at 105 feet as 83 dBA, yet in the bolded row in Table 1 under the "Construction Leq at 200 feet, dBA" column, the table lists the value at 200 feet as 83 dBA. Even if we incorrectly assume two tractors, two loaders, and two backhoes under grading, the sum of all the construction equipment for this phase at 200 feet would be 77 dBA. Therefore, Table 1 is misleading and/or incorrect.

Response to Comment No. O6-38

The comment states that the Project should consider an ambient-based threshold in addition to the City's Ordinance criteria to assess the impact of operational noise. The comment claims that the Draft EIR lacks details about the reference levels used in the SoundPLAN model and a narrative of the noise-generating operational activities and schedule. The comment also questions the effectiveness of the concrete wall depicted in the Draft EIR, stating that the presence of holes in the wall may reduce its noise reduction capabilities. See Response to Comment No. O6-15, which explains why the use of an operational ambient noise threshold is unnecessary, discusses the operational noise reference levels used in the SoundPLAN model for the Project's noise modeling, and addresses the effectiveness of the perimeter wall, which does not include holes.

The comment further states that the analysis in the Draft EIR did not address issues, such as truck idling, auxiliary noise sources such as generators, loud speech from shoot coordination, or parking lot activity at night in the MWD lot located directly adjacent to the residences east of the Project Site on Alderbrook Drive. The excess truck and trailer parking and base camp are

[36] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

accounted for by the parking lot modeling in the SoundPLAN model, which includes typical vehicle activity associated with parking lot activities, including engine idling. The comment's concern over loud speech from shoot coordination is not expected to occur since outdoor stages and/or sets are not a part of the Project; all sets would be located indoors. Only incidental outdoor filming is anticipated. Regarding auxiliary noise sources and nighttime parking lot activity, the model does include mechanical equipment and parking lot noise occurring during nighttime hours. Table 4.11-3 in Section 4.11, Noise, of the Draft EIR, showed the modeled noise levels at OFF1 through OFF8, which represent the residences along Alderbrook Drive would not exceed the nighttime noise limits.

Lastly, the comment questions whether the reference levels from the equipment cut sheets provided in the Noise and Vibration Study (Appendix J of the Draft EIR) were considered in the SoundPLAN model. See Response to Comment No. O6-15, which explains the reference levels used in the SoundPLAN model.

Response to Comment No. O6-39

This conclusory comment summarizes the concerns regarding the adequacy of the Draft EIR's noise analysis. Please see Response to Comment Nos. O6-37 and O6-38. As stated in those responses, the conclusions of the Draft EIR for construction and operational noise impacts are valid and supported by substantial evidence. This comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-40

The comment states their qualifications as a biologist for providing comments on the Draft EIR and biological resources report. The comment also introduces and states the qualifications for wildlife biologist Noriko Smallwood, describes the weather and vegetation observed by Ms. Smallwood during the site visit conducted on May 14, 2023, and provides photographs and a table listing the wildlife observed during the site visit. According to Ms. Smallwood, 40 species of vertebrate wildlife were observed on the Project Site during a 3.52-hour survey. Ms. Smallwood's survey results are noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-41

The comment states that a reconnaissance-level survey should serve only as a starting point toward characterization of a site's wildlife community, but it cannot alone provide an inventory of species that use the site and asserts that a much greater survey effort is needed at the site in order to characterize the existing environmental setting with sufficient accuracy to support a sound impacts analysis. To support this assertion, the comment cites data from past surveys to demonstrate that more time spent on or repeat surveys result in more species detected. The presented data are noted for the record and will be forwarded to the decision-makers for review and consideration.

The reconnaissance survey conducted by Rincon was not intended to be a comprehensive inventory of all species that inhabit the Project Site, and it is not represented as such in the Rincon Biological Resources Assessment (BRA). A comprehensive biological inventory of the Project Site is not necessary to support a sound impacts analysis because professional biologists are able to make inferences about the potential for special-status wildlife to occur based upon known ranges, habitat preferences for the species, species occurrence records from scientific database

queries, previous reports for the Project Site, and the results of surveys of the Project Site. Based on the results of the initial habitat assessment, focused surveys were performed for specific special-status species determined to have the potential to occur based on the distribution and quality of the vegetation and associated habitats on the Project Site, such as for western burrowing owl and coastal California gnatcatcher. As such, additional repeat or focused surveys are not necessary.

Response to Comment No. O6-42

The comment states that the Draft EIR's surveys of the Project Site for biological resources and reviews of literature, databases, and local experts for documented occurrences of special-status species are incomplete and misleading and that survey limitations should be disclosed. The comment does not specify why the information provided in the Draft EIR is incomplete or misleading, and the comment's claim is not supported by substantial evidence. As stated in the BRA prepared for the Project, surveys were conducted in accordance with applicable USFWS and CDFW guidelines and requirements. Literature review consisted of queries of the USFWS Information, Planning and Conservation System, CDFW California Natural Diversity Database (CNDDB), and the California Native Plant Society Online Inventory of Rare, Threatened and Endangered Plants of California. Furthermore, the BRA stated that the biological reconnaissance survey was limited by the environmental conditions present at the time of the survey. As noted in Response to Comment Nos. A1-9 and O6-41, additional focused surveys for SSC species are not necessary to reduce Project impacts to a less-than-significant level.

Response to Comment No. O6-43

The comment states that the Rincon's statement in the BRA that "all biological resources encountered on-site were recorded" is false and misleading because no biologist is capable of recognizing all evidence of wildlife. The comment recommends that the Draft EIR be revised to more carefully report what was seen and understood by the biologists. In addition, the Draft EIR should describe the limitations of the surveys and the reporting of survey outcomes.

As discussed above in Response to Comment No. O6-42, the BRA disclosed the limitations of the biological reconnaissance survey. The last sentence under "**FIELD RECONNAISSANCE SURVEY**" on page 4.3-16 in Section 4.3, Biological Resources, of the Draft EIR was revised to state that all vertebrate wildlife species observed were documented, as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

> Representative photographs of the Project Site were taken and an inventory of all plant and vertebrate wildlife species observed was compiled (provided in Appendix **D**).

Response to Comment No. O6-44

The comment states that the duration of the reconnaissance survey is unreported and that Rincon's biologists should have seen more species of wildlife. This comment is similar to Comment No. O6-7. Please refer to Response to Comment No. O6-7 above.

Response to Comment No. O6-45

The comment states that the number of species detected on-site is greater than the number of species Rincon reported. The comment also claims that Rincon's survey effort was deficient and states that the Draft EIR needs to be revised with the outcomes of more surveys and more

complete reporting to include the total number of species detected and not just the species detected during the reconnaissance survey. Please see Response to Comment No. O6-41 regarding the sufficiency of the reconnaissance survey effort to evaluate existing conditions and potential Project impacts to sensitive biological resources.

The comment also states that USFWS Birds of Conservation Concern (BCC) are special status and should be reported as such. Birds of Conservation Concern are a USFWS effort to identify non-listed birds that might become candidates for listing in the future. The Draft EIR evaluated USFWS-listed or candidate species but did not consider species that might become candidates for listing in the future. This is a reasonable approach. The City understands that there is a long list of plants and animals – not just birds – that might experience increased pressure in the future and that might become candidates for listing or, subsequently, become listed species. The Draft EIR presented an appropriately broad reach to include candidate species, as well as listed species and is not required to include potential candidates. However, birds not specifically identified as listed or candidate species were not excluded from consideration in the Draft EIR, which recognized the importance of the federal Migratory Bird Treaty Act as an applicable law and prescribes Mitigation Measure MM-BIO-3 that requires specific actions to protect nesting birds from construction impacts.

Response to Comment No. O6-46

The comment asserts that Rincon's statement that an individual Cooper's hawk was observed during the January 2022 reconnaissance survey, but a nest was not observed is misleading because it gives the false impression that the failure to observe a nest in January would indicate the species is not nesting on the Project Site. The comment also states that the same false impression was conveyed by the observation of a single, inactive passerine nest during the reconnaissance survey, implying that nesting is not taking place.

The comment's assertion that the Draft EIR is misleading regarding Cooper's hawk and nesting birds is inaccurate. The Draft EIR acknowledged that the potential for Cooper's hawk and nesting birds to be present within the Project Site is high and stated the following on page 4.3-18 in Section 4.3, Biological Resources, of the Draft EIR:

> *As potentially suitable habitat for these special-status wildlife species exists on the Project Site, implementation of the Project would potentially impact existing habitat. Construction of the Project would potentially result in direct impacts during initial ground-disturbing activities or indirect adverse impacts to special-status wildlife species if present. Construction activities have the potential to directly impact nesting birds through the destruction of nests or disturbances leading to nest failure. As such, impacts to special-status wildlife species (i.e., nesting birds) that exist on the Project Site or the areas immediately surrounding the Project Site would be potentially significant.*

The Draft EIR included Mitigation Measures MM-BIO-1 through MM-BIO-3 to reduce impacts to special-status wildlife species and nesting birds to a less-than-significant level.

Response to Comment No. O6-47

The comment states that the yellow warbler observed on-site in April 2022 relied on the Project Site for its migration to breeding habitat or may have been nesting on-site and that, contrary to Rincon's assessment, the Project Site provides important habitat value to yellow warbler.

Required habitat elements for yellow warbler nesting, such as riparian thickets of willow, cottonwoods, sycamores, ash, and alders, are not present within the Project Site. Not only does most of the Project Site consist of non-native grassland, but it is isolated and already fragmented from intact native habitats in the region and is surrounded by development that limits opportunities for wildlife movement, both locally and regionally. The large tracts of open space to the north and east of the Project Site, including the Quigley Canyon Open Space located approximately one mile to the east and the Angeles National Forest just east of the SR-14, contain suitable riparian habitat for yellow warbler and are far more likely to provide important nesting and migratory habitat value to the species.

Response to Comment No. O6-48

The comment states that non-breeding surveys for coastal California gnatcatcher were not completed for the Project Site. The comment also states that the burrowing owl surveys were not compliant with the available survey protocol by failing to meet 16 of the 34 applicable minimum standards and only partly complying with another four of the standards. The comment recommends that the burrowing owl surveys be repeated in accordance with the survey and reporting standards and that they should be completed by qualified biologists. This comment is similar to Comment No. O6-8. Please refer to Response to Comment No. O6-8 above.

Response to Comment No. O6-49

The comment states that an important part of documenting a site's environmental setting is a desktop review, which includes literature and database review and consultation with local experts to inform and augment reconnaissance surveys and to help determine which protocol-level detection surveys should be conducted. The commenter suggests that the Draft EIR's desktop review is incomplete and flawed because it neglected readily available species occurrence databases and provides no evidence that any local experts were consulted. The commenter indicates that Dr. Smallwood conducted an independent database review and a Project Site visit, which resulted in the identification of 122 special status wildlife species occurring near enough to the Project Site to warrant analysis of their occurrence potential. This comment is substantially similar to Comment No. O6-9. Please refer to Response to Comment No. O6-9 above.

The comment reiterates the assertion that detection likelihoods of most special-status species are low during reconnaissance-level survey and maintains that additional surveys are needed. Please refer to Response to Comment No. O6-41, which explains why additional surveys are not necessary.

Response to Comment No. O6-50

The comment states that it is inappropriate to assign low likelihoods of occurrence to special-status species of wildlife simply because the biologist did not detect the species during a single reconnaissance survey.

The Rincon BRA did not exclude the potential for special-status wildlife species to occur based on failure to detect the species during the reconnaissance survey. As described in Response to Comment No. O6-41, additional factors were considered, such as availability and quality of habitat to support the species, known ranges, species occurrence records from scientific database queries, previous reports for the Project Site, and the results of surveys of the Project Site.

Response to Comment No. O6-51

The comment states that more special-status species occur at the Project Site than those that were identified in the Draft EIR and by Rincon and that the Draft EIR incorrectly characterized the wildlife community at the Project Site. The comment also suggests that additional surveys would result in the detection of more species. These issues have been addressed in Response to Comment Nos. O6-7, O6-9, and O6-41. Response to Comment No. O6-7 and O6-9 explain the discrepancies between the species detected by Ms. Smallwood and those that were reported by Rincon. Response to Comment No. O6-41 explains why additional surveys are not necessary.

Response to Comment No. O6-52

The comment claims that there are three types of impacts that are likely to result from the Project, two of which are not analyzed in the Draft EIR. According to the comment, the one impact that is addressed in the Draft EIR is only mentioned and concluded to be of no significance. The comment correctly cites the Draft EIR's characterization of the Project Site as a relatively flat, undeveloped piece of land with low, ruderal plants and gravel driveways that has been cleared of the majority of its natural vegetation and disturbed by past uses. The presence of 16 coast live oak and valley oak trees within the context of the largely disturbed Project Site is also accurately cited. The comment provides no specifics on the three types of impact. As such, this comment is noted, and no additional response is required.

Response to Comment No. O6-53

The comment states that the Draft EIR failed to analyze the Project Site's capacity to support wildlife and estimates the loss of 1,924 bird nests as a result of the Project's development. The comment states that the Draft EIR must be revised to analyze the Project's impacts to wildlife caused by habitat loss and habitat fragmentation. This comment is similar to Comment No. O6-16 but cites studies from 1948 and 1982 to support the bird nesting densities and calculations summarized in Comment No. O6-16. Please refer to Response to Comment No. O6-16 above.

Response to Comment No. O6-54

The comment states that the Draft EIR purported to analyze whether the Project would interfere substantially with the movement of any wildlife species or with established wildlife corridors but only addresses interference with wildlife corridors and ignores interference with movement of wildlife species. This comment is similar to Comment No. O6-17. Please refer to Response to Comment No. O6-17 above.

Response to Comment No. O6-55

The comment states that Project-generated traffic impacts to wildlife would be substantial and highly significant, based on the extrapolation of a wildlife fatality study conducted on Vasco Road in Contra Costa County, California[37] with the Project's estimated annual VMT. The comment goes on to state that the Project would result in a substantial and highly significant number of traffic-related wildlife fatalities.

[37] M. Mendelsohn, W. Dexter, E. Olson, and S. Weber, Vasco Road wildlife movement study report. Report to Contra Costa County Public Works Department, Martinez, California, 2009.

While the study that the comment cites is not publicly available, Vasco Road is a two-lane road that bisects relatively undeveloped open spaces. Accordingly, the comment's estimated number of traffic-related wildlife fatalities that may result from Project development is not accurate when considering the existing high vehicle circulation on Railroad Avenue immediately to the west of the Project Site, as well as on Wiley Canyon Road to the north and Lyons Avenue to the south. The Project Site is not within a local or regional wildlife movement corridor and wildlife are not expected to travel through the Project Site and across Railroad Avenue due to the development that currently exists immediately to the west. Therefore, wildlife collisions along Railroad Avenue immediately to the west of the Project Site are currently low and would be expected to remain low during the operation of the Project due to the vast amount of development that currently exists.

Response to Comment No. O6-56

The comment states that the Project could result in bird mortality from window collisions, and recommends exploration of alternative window layouts or alternative types of glass to minimize bird-window collisions. The comment cites numerous bird fatality and collision studies, which provide fatality estimates to support the claim. These estimates are noted in the administrative record and will be forwarded to the decision-makers for review and consideration.

Please refer to Response to Comment No. O6-17, which concludes that potential Project impacts to birds due to window collisions would not be significant given the extensive existing development surrounding the Project Site. The comment's recommendations for the use of alternative types of glass or alternative window layouts is not necessary to mitigate Project impacts to biological resources; however, these recommendations are noted in the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-57

The comment states that the Draft EIR lacked an adequate analysis of the Project's cumulative impacts on wildlife, references certain sections of the CEQA Guidelines that provide guidance on how to analyze cumulative impacts, and provides commentary on approaches to evaluating cumulative impacts. However, the comment does not identify any significant cumulative impacts that would be caused by the Project or that the Project would contribute to in a considerable manner. As discussed in the Draft EIR, the loss of habitat caused by the Project is not a significant impact either on a Project-level or cumulative. The majority of the Project Site is covered in non-native grasses. The habitat areas of the Project Site, including Placerita Creek and the northern ridgeline would be largely preserved in place. Given the limited acreage of habitat impacts of the Project and the vast tracks of protected open spaces in the Project vicinity (e.g., Quigley Canyon Open Space, Whitney Canyon Park, Golden Valley Ranch Open Space, Saddletree Open Space, Gates King Open Space, Wildwood Canyon Open Space, and the Angeles National Forest), the Project's contributions to the cumulative loss of open space and potential habitat would not be cumulatively considerable. Please also refer to Response to Comment No. O6-18 above.

Response to Comment No. O6-58

The comment states that Mitigation Measures MM-BIO-1 through MM-BIO-5 would not reduce impacts related to the productive capacity of breeding birds and special-status species that make use of the Project Site, habitat fragmentation, wildlife collisions due to Project-generated traffic, and bird window strikes to less-than-significant levels. The comment also provides recommended revisions to Mitigation Measures MM-BIO-2 through MM-BIO-5, including a requirement for a

security deposit greater than or equal to 150 percent of the estimated cost of the restoration prior to construction should some portion of, or all of, the restoration fails.

As detailed in Response to Comment Nos. O6-17 and O6-19, Project impacts due to nesting bird and special-status species habitat loss, habitat fragmentation, wildlife collisions, and bird window strikes would be less than significant, and additional mitigation is not warranted. Mitigation Measures MM-BIO-4 and MM-BIO-5 establish minimum compensatory mitigation requirements for impacts to sensitive natural communities and jurisdictional areas and require the preparation of a Restoration Plan to identify specifically how the replacement habitat would be acquired/restored. Mitigation Measure MM-BIO-4 identifies the minimum content requirements for the Restoration Plan and Mitigation Measures MM-BIO-4 and MM-BIO-5 collectively require the Restoration Plan be approved by CDFW, the U.S. Army Corps of Engineers, and the Los Angeles Regional Water Quality Control Board prior to initiating construction or any site disturbance. As the mitigation measures included in the Draft EIR commit the Project to mitigating the potentially significant impacts and include specific performance standards that must be achieved, a security deposit is not appropriate or required. In addition, as discussed in Response to Comment No. A1-8, Mitigation Measures MM-BIO-1 has been revised to further ensure that impacts to biological resources would be less than significant. The comment's recommended revisions are not warranted but are noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-59

The commenter provides recommended measures for protocol surveys for burrowing owl, California gnatcatcher, and special-status bats; pest control to prohibit rodenticides and avicides; Bird-Safe Guidelines; and additional compensatory mitigation for road mortality and window strikes. The commenter also recommends using California native plants for landscaping. As stated in Response to Comment No. O6-58, Project impacts to biological resources would be less than significant, and additional mitigation is not warranted. Therefore, incorporation of the comment's recommended measures in the Draft EIR is not required under CEQA. However, the recommended measures are noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O6-60

The comment claims that the Project is not in a VMT-efficient location and that the Draft EIR's assertion that the Project is in such location is based on an outdated transportation model that is known to underestimate commute VMT. The comment also asserts that Census data indicate that the actual average commute distances of workers employed in the Project area is 2.8 times greater than those identified in the Draft EIR. The map in the Draft EIR showing the location of the Project in a zone that generates above average work VMT per employee generally serves as a guideline that directs further study of individual projects within those various zones. Accordingly, further analysis of the Project's VMT impacts was conducted and included in the Draft EIR.

The 2016 SCAG model was the model that was used to establish the VMT thresholds in the Santa Clarita area and, therefore, the most logical model to use in the analysis of the Project. The use of this model is consistent with City's TAU. As described in Response to Comment No. O6-20, the calculation of VMT that concluded "average commute distances of workers employed in the project area is 2.8 times as great as asserted in the DEIR" shows the lack of understanding between average commute distance and work VMT per employee.

In addition, the location of the Jan Heidt Newhall Metrolink Station within 2,500 feet of the Project Site is further indication of the potential VMT-efficient characteristics of the Project Site. Accordingly, the VMT calculations reported in the Draft EIR are realistic and consistent with the methodology called for in the City's TAU.

Response to Comment No. O6-61

The comment questions the commute distances used in the calculation of the Project's VMT. The "temporary" workers generated by the Project are likely to be on-site for months at a time. The calculation of work VMT per employee is based on the residential location of the worker and the mode split of the employee travel to the Project Site. There is nothing in the calculation of work VMT per employee that is affected by the length of the employee's tenure on-site. The regional travel demand forecast model used to predict the geographic distribution of Project employees takes into account the regional distribution of both residential and employment land uses and estimates the most likely distribution of employees based on the regional pattern of employment opportunities. Accordingly, the calculation of work VMT is made independent of the temporary vs. short-term vs. permanent employment status.

Response to Comment No. O6-62

The comment begins with an incorrect statement that the Project's VMT impacts require mitigation because the Project was found to have no significant VMT impacts, and, therefore, VMT mitigation measures are not required.

The comment is correct that a TDM Program for a Project with a combined permanent and non-permanent employee base is difficult to manage. For this reason, the VMT analysis in the Transportation Assessment and in Section 4.14, Transportation, in the Draft EIR, did not take any trip reduction credit based on the potential effects of a TDM Program.

The very nature of a studio campus results in flexible hours because the industry typically begins the day prior to the typical commuter peak hour and ends prior to the afternoon peak commuter hour. While this offset schedule does not affect the VMT calculations of the Project, it does reduce the peak hour congestion that affects the neighborhood and the commuters driving past the Project Site.

The TDM Program for the Project Site is divided into two parts. The first part comprises the permanent TDM measures that would be implemented by the applicant. These would include support for carpool matching services among the on-site employees, on-site bicycles to move around the campus, carpool priority parking locations, and an on-site transportation information center. The second part of the TDM Program comprises the TDM measures that would be sponsored by the tenants of the Project and could include shuttles to the Metrolink Station, Guaranteed Ride Home Program for transit users, and telecommuting opportunities.

Response to Comment No. O6-63

The comment claims that the GHG impacts in the Draft EIR were underestimated because the trip generation used in the air quality analysis (7,021.82) is less than what was presented in the Transportation Analysis (7,293). The comment also alleges that the trip lengths assumed in CalEEMod were too low based on the Census Data for the existing commuting to the Project area.

At the time the air quality analysis using CalEEMod was conducted, the most conservative estimate of trip generation was the default rates in the model, which resulted in 7,021.82 trips per day. While

the final version of the Transportation Analysis includes a slightly higher (approximately 4 percent) trip count, the GHG emissions analysis is still valid. The addition of approximately 272 trips would result in an increased emissions of mobile vehicles of approximately 334 $MTCO_2e$ annually. This was determined by taking the total mobile source emissions of 8,627 $MTCO_2e$, dividing it by the total number of trips (7,021) and multiplying that by the increase in trips of 272. The total annual GHG emissions attributed to the Project would increase by less than 3 percent to 11,707 $MTCO_2e$. Regardless of the slight increase in GHG emissions from the increase in trips, the significance determination for the Project is based on consistency with the State and regional GHG reduction plans, and, as such, the additional GHG emissions from the increased vehicle trips would not change the significance determination for the analysis.

With regard to trip lengths, the CalEEMod defaults were used because the defaults were greater than the VMT identified in the Transportation Assessment to ensure the analysis was conservative. In addition, the use of the default values in CalEEMod associated with the Project area is an approach recommended by the Air Districts, which approve of the use of the CalEEMod defaults where project specifics are not available.

To reflect the trip count noted above, the following revisions to the Draft EIR were made:

- The last sentence in the first paragraph on page 4.7-13 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  Operation of the Project would generate approximately ~~11,373~~ 11,707 $MTCO_2e$ per year, which includes the amortized construction emissions.

- The Mobile Emission Source and the Total Annual Emissions in Table 4.7-2 on page 4.7-13 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, were revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

Table 4.7-1
PROJECT OPERATION GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions (MTCO2e)
Construction[a]	196
Operation	11,177
Area	<1
Energy	1,688
Mobile	~~8,627~~8,960
Solid Waste	774
Water	12
Generators	37
Food Trucks[b]	39
Total	**~~11,373~~11,707**

Notes:
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
[a] Amortized construction-related GHG emissions over 30 years.
[b] Food truck emissions account for electricity and waste emissions only. Mobile emissions are assumed to be part of the anticipated daily emissions quantifications and are included under mobile emissions.
*Refer to **Appendix C** of this Draft EIR for detailed model input/output data.*
Source: Rincon Consultants, Inc. 2023.

- The last sentence in the last paragraph on page 4.7-13 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

  As shown in **Table 4.7-3**, operation of the Project with the application of the reductions discussed above would generate approximately ~~7,252~~ 7,586 MTCO2e per year.

- The Mobile Emissions and the Total emissions in Table 4.7-3 on page 4.7-14 in Section 4.7, Greenhouse Gas Emissions, of the Draft EIR were revised as follows:

Table 4.7-2
PROJECT OPERATION REDUCED GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions ($MTCO_2e$)
Construction[a]	196
Operation	7,056
Area	<1
Energy	1,688
Additional Renewables Portfolio Standard Reduction	(183)
Mobile	~~8,627~~8,960
Electric Vehicle Charging Stations	(3,357)
Solid Waste	774
Assembly Bill 341	(581)
Water	12
Generators	37
Food Trucks[b]	39
Total	**~~7,252~~7,586**

Notes:
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
[a] Amortized construction-related GHG emissions over 30 years.
[b] Food truck emissions account for electricity and waste emissions only. Mobile emissions are assumed to be part of the anticipated daily emissions quantifications and are included under mobile emissions.
*Refer to **Appendix C** of this Draft EIR for detailed model input/output data.*
Source: Rincon Consultants, Inc. 2023.

Response to Comment No. O6-64

The comment questions the VMT analysis conducted for the Project. This comment is similar to Comment No. O6-20. Please refer to Response to Comment No. O6-20 above.

Response to Comment No. O6-65

The comment claims that the temporary workers generated by the Project would be drawn from the large Los Angeles County labor force employed in the film and video industry and that it is possible that commuters to the Project would travel longer distances, on average, than those currently commuting to the Project area. However, the comment does not provide substantial evidence to support the statement. This comment is similar to Comment No. O6-61. Please refer to Response to Comment No. O6-61 above.

Response to Comment No. O6-66

The comment claims that the Project is not a VMT-efficient location and may induce long commutes given the characteristics of the Project and that mitigating VMT impacts is essential. However, the comment does not provide substantial evidence to support the statement. This comment is similar to Comment No. O6-62. Please refer to Response to Comment No. O6-62 above.

Response to Comment No. O6-67

The comment claims that the number of trips used in CalEEMod is lower than the number of trips in the transportation analysis and that the CalEEMod analysis should be redone with the correct number of trip generation. This comment is similar to Comment No. O6-63. Please refer to Response to Comment No. O6-63 above.

Response to Comment No. O6-68

This comment is similar to Comment Nos. O6-1, O1-1, and O1-2. Please refer to Response to Comment Nos. O6-1, O1-1, and O1-2 above.

Response to Comment No. O6-69

This comment is in response to a public records request. Please refer to Response to Comment Nos. O6-1, O1-1, and O1-2 above.

Response to Comment No. O6-70

This comment is similar to Comment Nos. O6-1, O1-1, and O1-2. Please refer to Response to Comment Nos. O6-1, O1-1, and O1-2 above.

Response to Comment No. O6-71

The comment is in regard to the extension of the comment period for the Draft EIR. Please refer to Response to Comment No. O-1 above.

Response to Comment No. O6-72

The comment requests mailed notice of the availability of any environmental document related to the Project pursuant to CEQA, as well as notice of any and all hearings, meetings, and/or actions related to the Project. CREED LA has been included in the City's mailing list.

Response to Comment No. O6-73

The comment was directed to Chair Berlin and the Planning Commission and submitted during the 45-day comment period to extend the comment period and defer any action by the Planning Commission to a date after the public comment period. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

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LETTER O7

Friends of the Santa Clara River
PO Box 7713Ventura, California 93006 (805) 628-2250
www.fscr.org

5-22-23

Erika Iverson, Planning
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Sent via email to eiverson@santa-clarita.com

Re: Newhall Studio Project 21-109 Request for an extension to review the EIR and DEIR initial comments
Please copy to all members of the Planning Commission

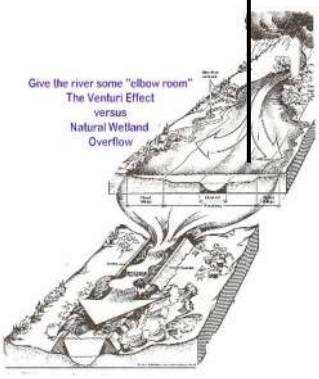
Dear Ms. Iverson and Planning Commission Members

Friends of the Santa Clara River (FSCR) was formed in 1993 to provide public oversight and demand protection for the Santa Clara River and its tributaries. The Placerita Creek and its floodplain are tributaries to the Santa Clara River and thus we present these initial comments to advocate for the stewardship and preservation of the river and its water resources. **O7-1**

The Santa Clara River provides water supply and habitat for humans and other species, including many endangered and fully protected species, along its reaches. Without careful stewardship, these resources will not exist for future generations.

We request an extension of time to comment on this DEIR. We were not notified of this project in spite of our considerable history of activity in relation to the SC River and its tributaries. The City and the developer released this document immediately before important religious holidays when volunteer organizations such as ourselves would be spending time with family and not be aware of a public release. We provide these initial comments and suggestions in order to abide by the short review period, but intend to submit additional comments that would protect both the public and the watershed in a few weeks. **O7-2**

Hydrology Study Deficient **O7-3**
The hydrology report only discusses run off from the project but does not discuss flows resulting from ARk storms (atmospheric rivers) as predicted by USGS[1] as a result of global warming and have recently occurred in this area. The floodplain of Placerita creek has acted to protect upstream residents from such new phenomena by allowing the creek to spread out across the flood plain. This project proposes to riprap and narrow the streambed (in violation of



[1] https://www.usgs.gov/centers/western-geographic-science-center/science/arkstorm

the Placerita Community Standards District). This could result in upstream flooding as demonstrated be the above diagram.

California's weather has always alternated between floods and drought. So we must prepare for both. As global warming causes more extremes in both areas, it is imperitive that we adapt our planning to prepare for this new reality. Preserving the floodplain will not only protect upstream residents but also ensure recharge of the ground water basin so that both this facility and others have an adequate water supply.

The proposal to narrow and riprap the creek is a significant impact. We therefore urge the City to not to allow building over the flood plain, by adopting either Alternative 2 or Alternative 3 and requiring:

- further setbacks from the creek and
- requiring all paved portions of the project to use permeable pavement

as mitigation requirements and conditions of approval.

Loss of natural flood plains will make the impacts of climate change worse. According to the State Climatologist, Michael Anderson, Ph.D., P.E. at California Department of Water Resources Division of Flood Management:

O7-3
Continued

"Variability in annual precipitation statewide and across the regions of the state has increased since the early 1980s, peaking in the late 1990s for most climate divisions (Figure 3) (He &Guatam, 2016). This shows that dry and wet precipitation extremes have become more frequent."

Based on the State Climatologist statement that wet extremes have become more frequent, prudence requires that flood plains be protected. Other agencies also suggest that the best way to protect communities from flooding is to protect the floodplain.[2] We ask for the protection of this flood plain to ensure public safety and for the increase water reliability it will provide.

Climate Change and Water Supply

River and creek flood plains provide space for the river during extreme rainfall events. High water levels are able to spread across these plains which reduce downstream flood potential and provide a natural means for groundwater recharge. Reduction in the size of the floodplain will have consequences for existing and planned development downstream with regard to erratic river behavior due to higher and faster flows and reduction in the local water supply.

We therefore believe that this EIR is deficient in its failure to asses loss of ground water recharge from impermeable surfaces and a mitigation requirement to address this issue.

Water Supply Assessment

In a 2008 Santa Clarita Valley water related appellate court decision[3], the 2nd appellate Court ruled that the public may not bring CEQA and other objections to Water Supply Assessments until the EIR stage of the project. Thus, we notice you with our objection here to certain

O7-4

[2] https://www.epa.gov/green-infrastructure/manage-flood-risk

[3] Cal.Rptr.3d ----, 2008 WL 1735399 (Cal.App. 2 Dist.), 08 Cal. Daily Op. Serv. 4413, 2008 Daily Journal D.A.R.5483

assertions made regarding water supply in the upper watershed of the Santa Clara River. However, since we have been provided inadequate notice and time to reply, these comments will be made after the end of the comment period but prior to the final EIR. We remind both the City and the developer that these comments, though outside your time restrictions (which we object to, see previous comments above) must still be considered.

O7-4 Continued

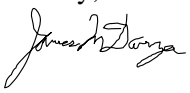
Conclusion

We believe that the need for housing outweighs the need for yet one more film studio in the Santa Clarita Valley and that therefore you should approve Alternative 2, the original zoning. However, should you vote to approve this project, we urge you to adopt Alternative 3 with the additional recommendations we have made, as the environmentally superior alternative. A reduced project foot print would allow room for an extended setback from the creek and additional preservation of some of the magnificent oaks present on the site. We urge you to support these alternatives in order to ensure future water reliability for all residents, both in your area and downstream, and protection from flooding for upstream residents, as well as a functioning ecosystem for riverine species.

O7-5

Thank you for your time and attention to these issues.

Sincerely,



James M. Danza, MS, AICP
Chair, Friends of the Santa Clara River

Letter No. O7
James M. Danza, MS, AICP, Chair
Friends of the Santa Clara River
P.O. Box 7713
Ventura, CA 93006

Response to Comment No. O7-1

This is an introductory comment that states the purpose of the Friends of the Santa Clara River (FSCR) and briefly describes the Placerita Creek and Santa Clara River. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O7-2

The comment requests an extension of time to comment on the Draft EIR, claims that FSCR was not notified of the Project, and states that the Draft EIR was released before important religious holidays. The comment also expresses FSCR's intention to submit additional comments to the City.

In compliance with the requirements of CEQA, the City published and distributed the Project's NOP on March 28, 2022, which notified interested agencies; organizations, including FSCR; and persons that the City would be preparing an EIR for the Project and invited comments on the scope and content of the EIR. FSC was included on the City's mailing list. The public review period for the NOP was from March 29, 2022, to April 28, 2022. The City held a public scoping meeting on April 21, 2022, and accepted comments on the scope and content of the EIR. On April 6, 2023, the City published and distributed the Notice of Completion and Notice of Availability of the Draft EIR, which notified interested agencies; organization, including FSCR, and persons that the City was accepting comments on the Draft EIR. The public review period for the Draft EIR began on April 6, 2023, and ended on May 22, 2023. In addition, three Planning Commission meetings were held on April 18, 2023, May 16, 2023, and June 20, 2023, to solicit comments from the public and the Planning Commission on the Draft EIR. As such, the City has provided sufficient notification and multiple opportunities for public input during the Shadowbox Studios EIR process. The public review process undertaken by the City for the Draft EIR fully complies will all requirements of CEQA and the CEQA Guidelines. Given the above, and based on direction provided by the City's Planning Commission, the Draft EIR review period was not extended.

Response to Comment No. O7-3

The comment claims that that Hydrology Study approved by the City of Santa Clarita is deficient and states that it "only discusses run off from the project and not the flows resulting from the Ark storms as predicted by the USGS as a result of global warming." The comment also asserts that rip rap and narrowing of the streambed would violate the Placerita Canyon Special Standards District (PCSSD) and could result in upstream flooding. The Conditional Letter of Map Revision (CLOMR) drainage study that has been prepared by Chang Consultants dated September 2022 utilized current FEMA 100-year data/mapping for the drainage analysis, which is standard practice by FEMA. The Placerita Creek Hydraulic Analysis Report, also prepared by Chang Consultants in January 2022 (Chang Report), analyzed both the existing and developed condition for the Placerita Creek drainage and concluded that there would be no adverse impact to the Project Site or upstream properties, contrary to the statement in this comment. Furthermore, the Project would

be required to undergo multiple City reviews to ensure that the Project's proposed buried rock bank stabilization of Placerita Creek would comply with the requirements of the PCSSD.

The comment further claims that narrowing and riprapping Placerita Creek would result in a significant impact due to the loss of a natural flood plain, which would worsen the impacts of climate change and reduce local water supply. However, the comment presents no other information or substantial evidence to support its claim regarding the loss of a natural flood plain or how stabilization of Placerita Creek would worsen the impacts of climate change. Contrary to the comment, as discussed in detail on pages 4.9-19 and 4.9-20 in Section 4.9, Hydrology and Water Quality, of the Draft EIR, the Project would provide enhanced flood control protection along Placerita Creek. In addition, a portion of the off-site stormwater, during peak storm events, would be routed to the Project's proposed infiltration/drainage basin. A 50-year storm event was also modeled for off-site subareas. The total existing flow rate generated by the off-site drainage area is approximately 375 cubic feet per second (cfs), and the flow rate generated by the Project would be approximately 197 cfs. To bring the total on-site Project flow rate down to the existing flow rate, approximately 178 cfs (during storms greater than or equal to the 10-year storm) would be split from the total off-site flow and diverted to a desilting inlet, conveyed through the Project, and sent to the drainage basin in the northern portion of the Project Site. A splitter manhole would allow up to 40 cfs from a storm event to pass through to Placerita Creek. An outlet from a splitter manhole would divert additional flow from larger storms, before passing through a weir that would continue through the manhole and outlet to Placerita Creek. The Project design would allow for stormwater to be contained and treated on-site through the use of an infiltration/detention basin and underground infiltration chambers, then released to Placerita Creek, ensuring that stormwater runoff rates and volumes entering the creek do not exceed existing stormwater runoff rates and volumes or change the currents, course, or direction of surface water that would affect Placerita Creek as a result of Project implementation. Only treated runoff and at quantities equal to or less than the existing volume would be released.

The comment also urges the City to adopt either Alternative 2 or Alternative 3 with the requirement for further setbacks from Placerita Creek and the use of permeable pavement as mitigation measure and/or conditions of approval. The comment's requests will be forwarded to the decision-makers for their consideration. However, as described in Section 4.9, Hydrology and Water Quality, of the Draft EIR, the Project would not result in significant impacts related to flooding, floodplains, groundwater recharge, or drainage. Therefore, additional mitigation measures are not warranted.

Regarding the claim that the Project would reduce local water supply, as previously discussed in Response to Comment Nos. O3-5 through O3-7 above, the Project would incorporate an infiltration/drainage basin, a low-flow drainage system and landscape designed to minimize runoff. On-site runoff from the Project Site would be captured in a closed pipe system and conveyed to Placerita Creek, a soft-bottom drainage channel that allows for percolation of surface water. Moreover, prior to discharging into Placerita Creek, the first-flush runoff would be routed to underground infiltration chambers or infiltration/drainage basin proposed for the Project. Additionally, a portion of the off-site stormwater, during peak storm events, would be routed to the infiltration/drainage basin. The Project's proposed drainage/infiltration system would capture the first ¾ inch of rainfall from each storm event and use infiltration chambers/basin to infiltrate this rainfall back into the earth. Given this proposed system, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.

Response to Comment No. O7-4

The comment expresses FSCR's objection to the Project's Water Supply Assessment (WSA) and states that specific comments to the WSA will be provided to the City after the end of the comment period but prior to the Final EIR. The comment states that City and developer must consider these late comments. Since no specific issues related to the WSA or Draft EIR are included in this comment, the comment is noted, and no additional response is warranted.

Response to Comment No. O7-5

The comment requests that the City approve Alternative 2 with the original zoning or Alternative 3 with FSCR's additional recommendations as the environmentally superior alternative. FSCR believes that these alternatives would ensure future water reliability for all residents, both in the Project area and downstream, and protection from flooding for upstream residents, as well as a functioning ecosystem for riverine species. However, the comment presents no other information or substantial evidence to support its claim. In addition, as discussed on page 5.0-22 in Section 5.0, Alternatives, of the Draft EIR, under Alternative 2, the water demand of 373 acre-feet per year (AFY) of water would be greater than the 207 AFY of water under the Project. With the exception of the bridge across Placerita Creek, Alternative 2 would also provide the same Placerita Creek stabilization as the Project. Furthermore, as described on page 5.0-7 in Section 5.0, Alternatives, of the Draft EIR, although Alternative 3 would reduce the development's square footage, it would require the same amount of grading as the Project, construct a bridge over Placerita Creek and provide the same bank stabilization as the Project, and disturb the same footprint as the Project. Accordingly, from a hydrological perspective, particularly as related to upstream and downstream conditions before and after development of the Project Site, impacts to hydrology and water quality under Alternatives 2 and 3 would be similar to the Project's less-than-significant impacts.

LETTER O8

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP
ATTORNEYS AT LAW

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May 22, 2023

[VIA EMAIL]

City of Santa Clarita Planning Division
Erika Iverson, Senior Planner – Shadowbox Studios Project Draft EIR
23920 Valencia Blvd, Suite 302
Santa Clarita, CA 91355
Email: eiverson@santa-clarita.com

Re: Shadowbox Studios Project
Master Case Number 21-109
Our client: Placerita Canyon Property Owner's Association ("PCPOA")
Comments to Draft EIR

Dear Ms. Iverson,

This firm has been retained by Placerita Canyon Property Owners Association ("PCPOA") to review and provide comments to the Draft Environmental Impact Report ("DEIR") for the proposed Shadowbox Studios Project ("Project"). Our comments are made on behalf of the Association as a whole. Members may be making individual comments.

REQUEST FOR AN EXTENSION TO PUBLIC COMMENT PERIOD

The record should reflect that on April 19, 2023, PCPOA initially requested a 15-day extension of the period within which to provide public comments to the DEIR. This request was made on two bases. The obvious is that the Project, as proposed, will result in over 1.2 million square feet of development and likely over 3,000 new people into an area which is (i) adjacent to an area which is, by City design and standards, of an equestrian, pastoral and quasi-rural character; (ii) already subject to traffic congestion; and (iii) which will essentially gridlock the only emergency escape route for Canyon residents and their livestock during the inevitable disaster, including wildfire, flooding, or earthquake. **O8-1**

A subsequent extension request by PCPOA was made on May 16th because the City did not provide public record documents requested through a public records request of April 19, 2023 until approximately 4:53 PM on May 15th. PCPOA's requests were denied with the only stated reason for the denial being (paraphrasing) that the City has dealt with bigger EIRs in the past. The denial of PCPOA's modest request for an extension was shocking given that the purpose of CEQA is to ferret out all relevant information regarding potential environmental impacts of a proposed project so that, "...the government and public [may be informed] about a proposed activity's potential environmental impacts..." (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 381.) PCPOA consists of a group of property owners

who are not experienced or adept enough to conduct an evaluation or provide meaningful input so that the ultimate decision makers have all the necessary information in front of them when making their decision. That is the heart of CEQA and one would expect that the City, keeping the interests of everyone in mind, would welcome as much meaningful and diverse input as possible from its citizens who will be most impacted by the Project.

Unfortunately, the Planning Commission summarily denied the modest extension requested by PCPOA. The only reasons for the denial articulated by the Planning Commission were that the City has dealt with bigger EIRs before and that the public had enough time to comment on those without extensions. This "reasoning" is both wrong-headed and bewildering. First, the impact on the environment and community of every project is different. Were those "big" EIRs for projects with the potential to jeopardize the safety and quality of life in a manner similar to Shadowbox's impact? Was there an active group who was attempting a good faith evaluation and comment on the project's impact? The bewildering part of the reasoning is that the requested extension was extremely modest and expressly authorized under CEQA Guidelines section 15105. The modest extension would have had very little effect on the progress of the Project. What possible detriment or prejudice could there be from a two-week extension to comment? **O8-1 Continued**

Moreover, on April 19, 2023, our firm, on behalf of PCPOA, provided a public records request to the City for documents that would assist in PCPOA's review of the DEIR. On May 1, 2023, after our inquiry, we were told that pursuant to the extension provisions of the Public Records Act, no response would be forthcoming from the City until May 15th. Thereafter, close to 5 PM on May 15, 2023, the day before the May 16th Planning Commission Hearing, we received what can best be described as a document dump from the City. The next day, at the Hearing, PCPOA's request for an extension of the time to comment was denied.[1]

Because of the frivolous decision of the Planning Commission to deny the request for an extension, the City's CEQA process for the Project is flawed. The public was not given adequate time or opportunity to provide meaningful comments. This is not only bad government but not in line with the purpose underlying CEQA. Should any legal action challenging the Project or the **O8-2**

[1] Having had an opportunity to merely scan the contents of the document dump, we find that the developer appears to have been provided at least a part of the administrative draft EIR well before it was released to the public and has, in fact, requested that certain language be inserted in the mitigation measures to meet the developer's desires. We are looking into this further as time permits but, based on what we have seen, whether the City seems to have decided that the preparation of this DEIR is a joint effort between the consultant, the developer, and the City. While a developer's involvement at that stage may not technically be prohibited by CEQA, many, if not most jurisdictions, avoid this appearance of impropriety and provide the developer and the public the draft EIR at the same time reserving the administrative draft for internal staff comments. The developer's early and preferential input places the City's refusal to grant the Association (and the public) a 15-day extension in an unflattering light.

process be necessary, we intend to raise the inadequate and inequitable duration of the comment period. Furthermore, by failing to provide adequate time to review and comment on critical project issues raised by the DEIR, we intend to continue to provide comments on the DEIR up to the time of certification. *Bakersfield Citizens for Local Control v. City of Bakersfield* 124 Cal. App. 1184 (2004); *Galente Vineyards v. Monterey Peninsula Water Management Dist.* 60 Cal. App. 1109 (1997). It is unfortunate that the City has put itself and the developer in this position. O8-2 Continued

DEIR Comments

We want to indicate that PCPOA does not necessarily oppose the concept of the Project. It recognizes that motion picture production has historically been and should continue to be an important part of the character of Santa Clarita. Evidence of that fact can be found with Melody Ranch Movie Ranch around which the Placerita Canyon community developed. That said, PCPOA is committed that the expansion of film production neither impact the safety of Placerita Canyon residents nor forever destroy the rural, equestrian-oriented environment which has been fostered by government and private regulation dating back well before City incorporation. Critical to preserving the rural and equestrian-oriented lifestyle is the CEQA requirement that the DEIR provide a complete and good faith analysis of all potential significant project impacts. We believe that the draft DEIR fails to meet that standard and is so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment are precluded. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043.) Below we set out more specific comments to the DEIR on an itemized basis and based on time constraints and limited available information. Initially, we point out foundational flaws that permeate many sections of the document. O8-3

- We question an environmental document for a project of the magnitude proposed arriving at the conclusion that there are no significant environmental impacts other than biological, cultural and geological. The DEIR found **no impacts** to anything relating to the safety and environment of the residents of the Placerita Canyon Community. The Project includes nearly 1.3 million square feet of structures, 2400 parking spaces, will create new on-site jobs for roughly 3,000 people, includes 19 massive sound stages, three-story office buildings and a five-story parking structure (necessitating a variance of the City's height restrictions and creating some of the Valley's highest structures). All this is located (i) in an area currently designated as residential under the City's General Plan and Zoning Ordinance; (ii) adjacent to a neighborhood that, through careful planning and management, is a semi-rural equestrian setting; and (iii) in a historically high wildfire zone with very limited means of emergency ingress and egress which will be dramatically limited by setting at least 3,000 souls with 2,500 vehicles at the mouth of such the emergency egress point. "The EIR must contain facts and analysis, not just the bare conclusions of the agency," and, "…must include detail sufficient to enable those who did not participate in O8-4

its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390.) We will provide more detail below but, on its face, the premise that this enormous project is consistent with the neighboring community and **has no significant environmental impacts** is difficult to believe, if not completely absurd. Given that the DEIR finds no impacts to the surrounding community, no mitigation measures are imposed nor are conditions of approval suggested. Thus, there will be no meaningful community and safety protections in place.

O8-4 Continued

- Much of the analysis relating to traffic, critically including emergency ingress and egress, seems to assume that the Dockweiler improvement and extension will be completed before the Project is operational. However, that is neither a mitigation measure nor, so far as we can tell, a precondition of this project. In fact, based upon the information we were able to glean in our brief review of the City's last minute document dump, the developer is adamant that it is not responsible for those (and other related improvements) but, rather, are obligations of the City. Unless the Project operations are conditioned on the completion of the Dockweiler improvements, the analysis within the DEIR is nonsensical, useless, and inappropriate under CEQA. CEQA requires that the City use as its baseline, with very limited exceptions, "...physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced…" The Dockweiler project is not yet complete rendering the City's environmental analysis deficient to the extent it relies on the completed project as its baseline for CEQA analysis. We recognize the City's statement that it intends to complete the project but there would be nothing unusual for a planned City improvement to be delayed for years or abandoned altogether. At the May 16, 2023 Planning Commission meeting, questions were asked of both the City and the traffic consultant attempting to clarify the extent of reliance on the Dockweiler project in the DEIR and its timing. The responses were obtuse leaving the issue extremely unclear. It is a very simple proposition and deserves a very simple answer. Simply put, if completion of the Dockweiler Project is not a mitigation measure or condition of Project approval, the DEIR is worthless and violates the requirements of CEQA.

O8-5

- The cavalier attitude of the DEIR with respect to emergency evacuation is befuddling. The Project will add 2,500 vehicles to an already congested area at the "mouth" of the primary emergency ingress, egress point yet the DEIR does little if anything to address this other than note that the evacuation time will be reduced if and when the Dockweiler improvements are made. Placerita Canyon is an area of extreme wildfire danger and emergency ingress, egress is critical for the safety of the residents. The fact evacuation

O8-6

will necessarily include many horse trailers (either coming in or leaving) to evacuate horses and other livestock was not considered. The evacuation of horses which is an integral part of the character of Placerita Canyon must be taken into account in evaluating the safety of the Project. Moreover, the DEIR summarily dismisses the roundabout concept which could significantly assist in aiding emergency evacuation and fails to discuss the possibility of providing an additional emergency ingress, egress route for Placerita Canyon. These omissions, on what is the most critical impact needing to be analyzed, are disturbing and render the DEIR inadequate and flawed.

O8-6 Continued

4.1 Aesthetics

The DEIR notes that the Project is subject to the Santa Clarita Community Character and Design Guidelines ("Design Guidelines") noting that the Design Guidelines are "intended to ensure that existing and future development is comparable in **size, scale and appearance with the existing neighborhood character…"** and that the site "is located withing the Placerita Canyon subcommunity, which is identified by the guidelines as a **rural, oak-studded, equestrian-oriented residential area…"** Elsewhere, the DEIR notes that the current general plan and zoning designation for the Project Site, consistent with the Design Guidelines, is residential. The DEIR goes on to acknowledge that the Project site is located in the Placerita Canyon Special Standards District which is made up "primarily of low-density, equestrian-oriented residential neighborhoods located *east* of the Project Site."

With that regulatory background, the Aesthetics analysis of the DEIR discusses the impact of the Project on surrounding views. Of particular concern to Association members are the views "from the East" which, as noted are "*residential properties…considered sensitive viewing locations.*" The DEIR analysis deftly limits the Project characteristics considered in the view analysis to the catering building and the facilities building and provides that those two buildings will be screened from "largely screened from the adjacent residential uses to the east by the nursery, landscaping and fencing." In other words, the City acknowledges that the Project will negatively impact the views from the sensitive viewing locations but puts forward the nursery, landscaping and fencing as supposedly mitigating the impact. (The DEIR, again, coyly, does not use the term "mitigate" but that is the only conclusion that can be drawn from the analysis). Nevertheless, despite the clear evidence and analysis to the contrary, the DEIR finds that no mitigation measures are required to protect sensitive viewing locations. That is contrary to the analysis. One must wonder why these necessary screening measures (never mind if they work) were not included as a mitigation measure to ensure that the developer and future owners both construct and maintain the Project to the sensitive viewing locations.

O8-7

A second issue with the analysis of the impacts of the views from the sensitive viewing areas is the fact that the analysis was limited to two, relatively small (at least in the scope of the

O8-8

Project) buildings. Are we to assume that the 19 foot sound stages, three-story office buildings and five story parking structure (which exceed the City's existing maximum height restrictions for this zone) will simply be outside of view from the sensitive areas? Perhaps, though unlikely, that is the case. The DEIR, however, provides no analysis or evidence to support that very questionable conclusion and thereby fails to its purpose. CEQA requires, and the City and public should expect, a full analysis of the Project impacts. That full analysis requires an analysis of all potential and foreseeable impacts. The intrusion of the massive structures proposed by the Project – which, to reiterate, exceed the maximum allowable height for the MXN mixed-use zone – will certainly have a negative impact on the sensitive viewing location of the Placerita Canyon Community.

O8-8 Continued

4.10 Land Use Planning

The DEIR analysis with respect to Land Use Planning is a bit of a shell game. The status quo is that the Project Site is designated for residential use under the City's General Plan and Zoning Ordinance (974 units per Table 5-1 of the DEIR). Properly designed and developed housing on the Project Site would meet the current designation and could avoid the inherent conflict with the rural and equestrian- oriented residential adjacent neighborhood. The Project, which includes a change in the land use designation from residential to industrial, by its very nature creates a significant environmental impact particularly on the Placerita Canyon Community. Where there was housing, there is now a massive industrial development. There is an impact.

O8-9

In its analysis, the DEIR focuses on the Old Town Newhall Specific Plan standards and simply declares, without any real analysis, that due to the promised architectural treatment of the massive structures, the Project looks good enough to fit in with the design guidelines for the Newhall Community. By contrast, the Placerita Canyon Special Standards District discussion is limited to a single block in Table 4.10-2 labeled "Applicable General Plan Policies." In that block, while noting the requirement to "ensure compatibility of development with existing rural equestrian lots and the adjacent Forest Land….City and the Placerita Canyon Property Owners Association shall work together to amend the PCSSD in the Unified Development Code to provide additional certainty and expectations for the developed areas within the District to create flexibility and continuity, subject to the provisions outlined above, for undeveloped properties in the District."

O8-10

To our knowledge, the City has not worked with PCPOA to develop amended standards applicable to undeveloped properties. In fact, the current PCSSD standards are not discussed in detail in the DEIR and, if they were, it would be abundantly clear that the Project does not meet those standards. If the suggestion is that those standards should be amended to address this Project and thereby satisfy the City's Land Use Policy 1.2.6, there should be discussion and analysis recognizing and detailing the PCSSD standards and analyzing what must be addressed and amended to accommodate the Project. It is simply inadequate to cite the policy and its requirements and then avoid any discussion of the specifics. The question is not whether there is

an impact but what can and should be done to address those impacts. Given the conflicting character of the Project with the established Placerita Canyon Community, this discussion would likely be somewhat difficult. Difficult or not, the analysis must be undertaken. **O8-10 Continued**

Moreover, under the heading of "Consistency", there are only two factors mentioned, both of which are inadequate to ensure that the Project is compatible with the surrounding area. One of those is the simple statement that the Project will have to go through other City processes, which are described only in very general terms without any detail or explanation as to how they might shape the project or, more importantly, what project characteristics should be analyzed to ensure compatibility. In short, any compatibility analysis relating to the Placertia Canyon Community is omitted. The City's staff report presented during the Planning Commission's May 16 meeting was woefully inadequate in addressing these myriad issues; at a minimum, these new impacts are sufficient to require additional discussion and mitigation measures which will trigger the requirement that the City recirculate this EIR for public review under *CEQA Regulations*. The proverbial "can" is kicked down some loosely described road without any guidance. This simply does not come anywhere close to the level of analysis on which the decision makers, ultimately the City Council, can rely. This deferral of review, analysis and mitigation is inadequate and violates CEQA requirements. **O8-11**

The second factor noted in the consistency review is that "the Project's location in the North Newhall Area already imposes the requirement of public participation and outreach to the Placerita Canyon Property Owners Association." This statement is misleading . First, Policy LU 1.2.6 has the requirement that the City and PCPOA work together to develop standards for new development. That requirement is prospective-it must happen before a new project is being considered. That did not happen and it is no answer to now say that a retrospective look at the District standards is sufficient to satisfy Policy LU 1.2.6 to the level of General Plan compatibilityTthe DEIR suggesting that closing the barn door after the horse leaves is an acceptable level of analysis. It is also somewhat ironic if not insulting that the DEIR refers to the "public participation and outreach to the Placerita Canyon Property Owners Association" while, at the same time, the City is trying to rush through the Project approval by denying the Association even a modest request to extend the time for public comment on the DEIR. We fully understand that navigating a general plan is a somewhat tedious exercise requiring a balance of competing policies. Our concern is that the DEIR does not provide sufficient information or analysis so that the City can meaningfully balance those policies. Certainly, this is a "can" that should be addressed now and not delayed until after Project approval renders the analysis moot. **O8-12**

The DEIR also purports to consider whether the Project will be consistent with the City Municipal Code. Our attention is focused on the "analysis" given to consistency with the Placerita Canyon Special Standards District. We have noted above that the purpose of the District is to protect the rural and equestrian-oriented nature of the Placerita Canyon Community. The "analysis" provided by the DEIR at page 4.10-39 is to simply ignore anything to do with the **O8-13**

character of the residential community and, instead, make selective reference to vague and general Project characteristics none of which appear in the form of mitigation measures. For example, the supposed nursery with the MWD right-of-way is cited as a project characteristic shielding the neighbors from the industrial views. We don't agree that this is sufficient but, it does evidence two points that run through the flawed DEIR. One, there is no discussion as to whether the MWD has agreed to allow the nursery. One is left to wonder whether there is an agreement in place and, assuming there is one, what are the terms of that agreement. If the nursery is an important factor in protecting the neighborhood from industrial views (and it must be as it is mentioned many times throughout the DEIR), then it is mandatory that the nursery be something real and achievable and not simply something a developer intends but is not obligated to implement.

O8-13 Continued

Along the same lines, the DEIR consistently equates project characteristics with mitigation and accepts that those characteristics will be in place. This is a flawed analysis. The analysis should be that the Project does have significant impacts but there are mitigation measures that reduce those impacts to insignificance. The analysis should include the effect upon the Special Standards District for Placerita Canyon. These mitigation measures will be used by the City to set conditions of approval for the Project to ensure that the "mitigating" project characteristics are mandatory. Thus, assuming it does act as an acceptable shield, the creation and maintenance of the nursery, or its equivalent, should be a mitigation measure mandating the maintenance of the nursery throughout the life of the Project. Otherwise, the DEIR is simply analyzing a project in a form that may or may not happen. In short, the acceptance of project characteristics as "mitigating" potential impacts, without imposing those characteristics are mitigation measures is a useless exercise and renders the DEIR and all CEQA analysis fatally flawed. It is difficult to accept and understand why the DEIR consistently goes to such pains to avoid acknowledging the potential impacts, which therefore preclude imposing measures to mitigate those impacts to a level of insignificance.[2]

O8-14

4.12 Population and Housing

The EIR notes that the City's state housing allocation is approximately 10,000. The EIR also recognizes that the Project Site's current land use designation is residential with the potential

O8-15

[2] This comment is applicable throughout the DEIR. Nowhere in the DEIR, at least for any topic relevant to the safety and lifestyle of the Placerita Canyon Community, is it acknowledged that there will be significant environmental impacts which must be addressed by mitigation measures and conditions of approval. Instead, mitigation of those impacts is left up to the goodwill of the developer for implementation and maintenance. That is the very purpose of an EIR. As presented by the DEIR, the City is left to simply accept the developer's goodwill to implement project characteristics that are relied upon by the DEIR to determine to find no significant impacts. This is fundamentally inapposite to the spirit and letter of CEQA.

for providing 974 additional housing units, of which almost 20% are affordable, to the City's housing stock.[3] The Project will remove the possibility of residential development on the Project Site and thereby remove nearly 10% of potential housing units potentially available within the City. At the same time, the Project will create approximately 2,400 **new jobs.** Thus, based on the DEIR the impact of the Project will be to bring 2,400 new employees to the area many of which will be hoping to live close to work. In fact, employees living close to work is the key to the DEIR's very analysis of Transportation impacts because, in the DEIR's theory, those employees will be commuting by bicycle or municipal transit. This obviously leaves the multi-pronged dilemma, unanswered or even analyzed in the DEIR as to (i) how the loss of 974 residential units will impact the ability of the City to meet its housing allocation obligation; and (ii) what impact, if any, will the influx of 2,400 new employees have on the housing market in the City and surrounding areas. These factors need to be analyzed and evaluated to determine the impacts of the Project on housing. There DEIR fails to do so.

O8-15 Continued

There is some indication that the DEIR recognizes the dilemma which it purports to solve by arriving at the inexplicable conclusion that: "Rather than increase population growth in the City, it is anticipated that the employment growth would be filled by existing residents of the City." This statement, which essentially forms the foundation of the DEIR's conclusion that the Project will have no impact on housing, is almost certainly false. We have not had the time or opportunity to study this issue but unless there are 2,400 souls in Santa Clarita qualified and waiting to work in the film production industry, we believe that the new jobs will not be "filled by existing residents". Rather, it is almost certain that these new jobs will be filled by new residents or employees who live outside the City but want to relocate closer to work. At a minimum, the DEIR needs to provide the basis for its conclusion that "existing residents" will be lining up to work at the new Project. Further, if that is the basis for the finding, what, if any program or incentive will be attached as a mitigation measure or a condition of approval to even promote the hiring of existing residents, if the DEIR conclusion is complete nonsense and renders the entire Population and Housing analysis of the DEIR inadequate.

O8-16

4.14 Transportation

The conclusion of the DEIR that there are no significant Transportation impacts, on its face, is ridiculous. How is it even possible to conclude that adding a project of this magnitude, with parking for 2,400 vehicles (not to mention the traffic for support services, deliveries, etc.), located along an already congested area will **have no significant environmental impact without the imposition of any mitigation measures?** The answer is obviously that it will have significant impacts on the transportation environment. The only way to reach the contrary conclusion of the

O8-17

[3] There is an internal inconsistency in the DEIR as to whether the current land use designation of the Project Site will allow 974 or 924 new dwelling units. Regardless of the number, the concept is the same.

DEIR is to ignore the reality of the situation and attempt to hide behind a wall of statistics and misguided assumptions. **O8-17 Continued**

Our detailed comments to the transportation section of the DEIR are generally set out in the attached May 19, 2023 review letter from Alex Tabrizi, PE, TE (a licensed traffic engineer). In his review letter, Mr. Tabrizi notes many questions and concerns with the transportation analysis of the DEIR. We incorporate each of his assessments and comments. We request that they be addressed in the Final EIR. **O8-18**

Nevertheless, in addition to Mr. Tabrizi's comments, we will address some of the problems with the DEIR Transportation analysis. The first issue is whether the Project will be conditioned on the completion of the necessary road improvements particularly the Dockweiler Extension project. It is clear both in analysis and anecdotally that without the Dockweiler Extension project and the other required traffic improvements, the Project will have a significant and potentially disastrous impact on the traffic circulation around the project and, in particular, for the residents of the Placerita Canyon Community. As noted earlier in these comments, a clarification of this position was requested at the May 16, 2023 Planning Commission meeting. This would seem to be a simple and fundamental question. The answers from both City staff and the EIR traffic consultant were far from clear and leave the status of the traffic improvements in relation to the commencement of operations on the Project, unclear. This simple question, which is critical to the Placerita Canyon Community and should be critical to the City. If the answer is that the commencement of business operations on the Project Site is contingent on the completion of the required traffic improvements (most particularly the Dockweiler project), then there will be substantially less questions and comments on the Transportation analysis. If, however, the Project is not contingent on those improvements, the transportation analysis is fatally flawed and completely useless to the City in making the ultimate determination. **O8-19**

We also note that the DEIR finding of "no impacts" is inconsistent with the traffic study on which the analysis is entirely based. Table 16 of the traffic study is a chart of existing Levels of Service potentially impacted by Project traffic. As noted in the attached Tabrizi letter, we question and/or disagree with the data and methodology used to create this table and support the DEIR Transportation conclusion. However, taking Table 16 on its face, there the Project will create a significant impact on the intersection of Railroad and 13th Street by dropping the Level of Service to D. This is the intersection through which traffic from the Placerita Canyon Community will travel and, as set out in the traffic study, there will be a significant impact. That finding alone should trigger a response in the DEIR to consider and impose mitigation measures to eliminate that impact. Instead, the DEIR simply ignores it. **O8-20**

Our concern is that the completion of the Dockweiler Extension improvements are not a condition of commencing business operations for the Project. That concern is based on (i) the lack of clarity within the DEIR itself; (ii) the finding that there is no significant impact to **O8-21**

transportation; (iii) because of the finding in (iv) there are **no traffic mitigation measures** set out in the EIR; (v) the failure of City staff and the EIR traffic consultant to give a straight answer to a simple question at the recent Planning Commission meeting; and (vi) changes made to the DEIR regarding who bears the responsibility for traffic improvements which were made as the insistence of the developer and lead to the conclusion that it has no intention of slowing down if the City does not complete the required improvements.[4]

O8-21 Continued

We also must question the conclusion of DEIR that the Project will have no significant impact, without any mitigation measures, on emergency evacuation. We will address that concern in more detail in the Wildfire section below. It is significant and obvious that the addition of the Project will dramatically and potentially fatally, lower the evacuation time for the Placerita Canyon Community including the many horses living in an equestrian-oriented community.

O8-22

We also question the degree of analysis that went into rejecting the idea of a traffic circle. It seems that the concept, which PCPOA finds interesting and promising, is now being rejected out of hand. We believe that a proper analysis could conclude that the traffic circle reduces the traffic impacts for both day to day traffic and, more importantly, for emergency evacuation.

O8-23

4.17 Wildfire

The most critical aspect of an environmental analysis for the Project should have been its impact on the safety of the surrounding community. Specifically, as we have noted repeatedly, the Project is located at the sole emergency exit point for the Placerita Canyon Community.[5] Under current conditions, the evacuation time for the Community is approximately 2.5 hours. We believe that estimate is low because it does not consider the number of horses that will need to be evacuated from the "equestrian-oriented" Community.

O8-24

As with Transportation, we have provided comments from an expert in the field, former Cal Fire Chief, Rob Lewin. Mr. Lewin has devoted his adult life to fire safety. With his work in San Luis Obispo and Santa Barbara Counties, Chief Lewin has a valuable reservoir of expertise regarding all aspects of wildfires of the type that inevitably threaten the Project area. We incorporate Mr. Lewin's comments into this letter but will, nevertheless, highlight some of the particularly egregious analytical failures of the EIR he observed.

O8-25

[4] We note that the charts provided by the traffic study carry a footnote that certain Dockweiler intersections will be "constructed by the Project." We fail to see any requirements or mitigation measures in the DEIR requiring the construction any intersections by the Project. If, as it seems, that was the basis for the traffic study then either those measures need to be imposed or the traffic study redone.

[5] There is a second potential exit point for some residents, but it is subject to physical and regulatory limitations. Moreover, given the configuration of Community with respect to historic fire patterns, the second potential exit is very likely to be toward the fire.

First, we note that most of the analysis of the DEIR wildfire discussion is focused on the safety and evacuation of the Project itself. Given that (i) the Project is located adjacent to escape routes without much immediate concern for evacuation bottlenecks; and (ii) the Project, unlike many of the adjacent homes, will be constructed under today's Fire Code standards, it is not surprising that the conclusion of the DEIR is that there will be no significant wildfire impact.

The DEIR, however, fails miserably to adequately consider the potential impacts on the Placerita Canyon Community. The most glaring example is that the Wildfire analysis, which is based entirely on the Dudek Fire Protection Study, relies entirely on the Gibson traffic study for its analysis of the evacuation patterns and timing in and around the project. We note that even though the Fire Protection Study references an evacuation analysis, it performs none. More critical, however, is the fact that the Gibson traffic study **failed to perform any analysis of the evacuation time for Placerita Canyon except with the completion of the Dockweiler improvements.** Table 24A provides the data for current evacuation times from Placerita Canyon. According the Table 24A, which did not take into account livestock removal, current evacuation time for Placerita Canyon is 2.6 hours. Table 24B purports to be the "after" condition in which evacuation times are reduced to 1.5 hours. However, Table 24B assumes that the Dockweiler improvements are complete. The comparison of these two tables renders both the Transportation analysis and the Wildfire analysis inadequate and in fact virtually useless in analyzing Project impacts.

O8-25
Continued

Unless the Project is going to be conditioned on the completion of Dockweiler, the DEIR must study the evacuation time from Placerita Canyon with the Project in full operation and without the Dockweiler improvements. Failing to do so leaves the City in the position of making a decision without the very information which an EIR is intended to provide. The most important question to be asked and answered is how much additional evacuation delay for Placerita will occur upon completion of the Project and without the Dockweiler extension. That is the only sure situation that will exist is the Project is approved and the one issue that must be addressed to determine potential Project impacts. The failure of the DEIR to do so is dumbfounding and renders the DEIR fatally flawed as to what is arguably the most important issue to be addressed; the safety of the Placerita Canyon Community. Unless and until that analysis is performed and made public for comment, the EIR for this Project cannot be certified. Safety cannot be sacrificed for expediency and the PCPOA is committed to making sure its members and other residents of Placerita Canyon are protected. Because, based on inadequate analysis, the DEIR found no significant impacts to fire safety, **there are no mitigation measures addressing wildfire safety. For a project of this magnitude, adjacent to older residential development with limited access and located in an area where the question is not if there will be a wildfire but only when. It is a shocking and irresponsible failure in the DEIR to attach any mitigation conditions to the Project to protect the Placerita Canyon Community.**

O8-26

As Chief Lewin provides, a wildfire moves at 4.7 miles per hour and can advance more rapidly when the frequent Santa Ana winds are strong and the terrain dry. Given all these factors, it is obvious that, even under current conditions and evacuation times, the situation is perilous. Allowing the Project to be approved with mitigation measures addressing the potentially deadly impact on evacuation times is inexcusable and renders the DEIR fatally flawed. The City cannot let the presence of a new shiny object distract it from the primary function of government; protecting its citizens. O8-27

Finally, at least for this letter, one solution for the evacuation problem might be to create a new emergency egress point for the Placerita Canyon Community. A review of topographical maps seems to indicate that there is a potential for such emergency egress point through the adjacent Circle J development. This potential should have been evaluated as a potential mitigation measure for the Project's obvious impact on wildfire safety. It does not appear that such a route, or any alternative emergency route, was even considered. O8-28

5.0 Alternatives

The Alternative analysis of the DEIR is defective in that it fails to adequately balance the relative impacts and benefits of the competing alternatives. In large part, this is due to the deficiencies in remainder of the EIR analysis which basically finds no impacts other than Biological and Tribal resources. Starting from the premise of no Project impact, it's not surprising that the Alternatives discussion is woeful. If you start from the false proposition that the Project creates no impacts, you are not likely to come up with a better alternative. Curiously, despite deeming the Project to have no impact, the DEIR does reluctantly admit that a smaller project, Alternative 3, which would have even less impacts (although less than none is a difficult concept). In short, so long as the remainder of the DEIR is defective, the meager Alternatives analysis in the DEIR will remain inadequate. O8-29

We note one example. Saugus Speedway was "considered" as an alternative site. It was rejected on two grounds neither of which appear to be valid.

> *Similar to the Project Site, the property is relatively flat… In addition, this property is included on the City's inventory of sites suitable for housing development;* ***development of the Project on this site would affect the City's ability to meet the State's Regional Housing Needs Allocation requirement and may have a potentially significant impact on population and housing.*** *Therefore, in accordance with CEQA Guidelines Section 15126.6(f), this alternative was rejected from further consideration.* O8-30

It is very curious that the loss of housing stock is given as a reason to reject the Speedway, yet the loss of 974 housing units due to the Project was barely discussed and not considered as a

significant environmental impact. This inconsistency demonstrates that the DEIR analysis was defective as to Population and Housing, Alternatives, or both. O8-30 Continued

Conclusion

The DEIR fails to meet the required CEQA standards on several levels. As noted in this letter and the attached expert comments, there are significant impacts from the Project that would be apparent based on a project environmental analysis. Those impacts could then be addressed by mitigation measures or, if necessary, adoption of a statement of overriding considerations. For whatever reason, the DEIR reads like more like a preordained approval authored by the developer's public relations consultant rather than providing the analysis necessary to protect the citizens of Santa Clarita and, more specifically, the residents of Placerita Canyon. As noted, due to the inexplicable refusal of the City to grant additional time for public comment, we reserve the right to continue to provide and will be providing comments on the DEIR and final EIR until certification and the filing of a notice of determination. Nothing herein should be construed as a waiver of any of PCPOA's rights or remedies under applicable law. O8-31

We welcome any questions or comments. Please contact the undersigned or Jeff Hacker.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

THOMAS D. GREEN

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May 22, 2023

Mr. Russ Hand, President
PLACERITA CANYON PROPERTY OWNERS ASSOCIATION
PO Box 220301
Santa Clarita, CA 91322

Subject: **Shadowbox Studios Project Transportation Study & Parking Analysis Peer Review, City of Santa Clarita, California**

Dear Mr. Hand,

MAT Engineering, Inc. (Consultant) conducted a peer review of the transportation/traffic analysis and parking analysis study for the Shadowbox Studios project and provides the following perspectives.

The peer review evaluated the following documents:

- *Draft Transportation Assessment for Shadowbox Studios (Gibson Transportation Consulting, Inc., January 2023)*.
- *Shadowbox Studios Parking Analysis Form (Gibson Transportation Consulting, Inc., December 20, 2022); and*
- *Shadowbox Studios Land Use Alternatives Trip Generation Comparisons (Gibson Transportation Consulting, Inc.).*

O8-32

Project Description:

As described in the Transportation Study:

- **Project Location:** In total, the Project Site is approximately 95.2 acres over multiple contiguous parcels; approximately 72 acres of the site will be developed and approximately 23.2 acres will remain undeveloped. The Project Site is bounded by vacant land to the north, vacant land and residential uses to the east, 12th Street and 13th Street to the south, and Railroad Avenue, the railroad and Arch Street to the west.

- **Existing Land Uses:** The project site is currently vacant.

- **Project Land Uses:** The Project includes the development of 476,000 square feet (sf) of stage area, 608,500 sf of studio support (including 37,500 sf of catering space), and 210,000 sf of production office. Base camp areas, a parking structure, and potential back lot space will also be provided. The Project would be constructed continuously in one phase and be completed by 2026

- **Previous Approval:** One previous proposal for this site under a different development group would have constructed 310 single-family residential units. This proposal was being processed by the City and a Draft Environmental Impact Report was pending release to the public when the property was acquired, and the full purpose film studio was proposed.

- **Project Parking:** The Project would provide up to 2,468 vehicle parking spaces in one five-level parking structure accommodating 1,070 parking spaces and three surface parking lots accommodating an additional 1,398 spaces (including parking for electric vehicles). Included in the 2,468 on-campus parking spaces, 296 parking spaces for electric vehicles would be provided, as would 56 accessible spaces compliant with the Americans with Disabilities Act (ADA). The Project would also provide 170 bicycle parking spaces (146 long-term and 24 short-term) for Project uses. Chapter 17.53 of the City of Santa Clarita Municipal Code sets forth property development standards. The standards set a height limit of 35 feet which may be increased to a maximum of 45 feet at the discretion of the director. The project parking structure and buildings appear to exceed these standards.

- **Project Vehicular Access:** Primary access to the Project Site is proposed via two driveways on 13th Street east of Railroad Avenue. Secondary access is provided via one driveway on 12th Street (Gate 3 Driveway east of Arch Street). Internal circulation will be provided by on-campus loop roads that deliver all campus traffic to/from the three proposed driveways. Similar to the previously approved residential project on the site, the Project Site will be served by the proposed but yet to be constructed Dockweiler Drive Extension Project (DDEP), which is claimed would improve access to/from the south. The Shadowbox Project proposes to signalize Arch Street & 13th Street & Project Driveway #1 & Project Driveway #2 and locate two driveways at this intersection: Gate 1 Driveway from the north leg and Gate 2 Driveway from the east leg. Arch Street, and possibly a portion of 13th Street, may be renamed Dockweiler Drive with completion of the DDEP. All three driveways would include security checkpoints for vehicles and pedestrians that would limit access to the facility to approved employees and visitors.

O8-32
Continued

Transportation Assessment for Shadowbox Studios (Gibson Transportation Consulting, Inc., January 2023) Review Assessments:

Assessment 1:

Related projects: The analysis assumes an evaluation of traffic to be added by 36 background and cumulative projects. The trip generation statistics are provided in Table 5 and the locations are provided Figure 7. The analysis fails to include an exhibit or data showing the magnitude of trips (trip assignment) added to each movement of the study intersections by these cumulative and background projects. **O8-33**

Assessment 2:

Table 6, Project Trip Generation: Trip generation is a fundamental basis for evaluating traffic conditions and is typically based on the rates for various land uses as published by the Institute of Transportation Engineers (ITE) manual. For unique land uses, the trip generation can be estimated using study of similar facilitates. The trip generation for the project appears to be based on empirical rates for studio land uses in the Los Angeles region. To demonstrate the source of data and how the studied sites compare in nature to the proposed project, more information and details on the studied locations and collected data that was used for the study must be provided. Otherwise, there is no basis for these opinions or conclusions. **O8-34**

The trip generation of similar uses from Los Angeles, a denser and more urban area, seems to reflect higher use of public transportation and other modes of transport, resulting in a lower trip generation estimate for a site in Santa Clarita. The only public transportation available in Santa Clarita is the local bus system and Metrolink primarily to downtown Los Angeles.

Furthermore, the trip generation contained in the EIR breaks down the uses into three categories with a trip rate for each use (stage, support, and production office). The EIR does not indicate how the breakdown data was obtained. Was it from the trip survey of similar studios?

Assessment 3:

Table 6, Project Trip Generation: The draft EIR does not indicate how the trip generation from the studies was considered or aretypical operations for the land use. How does this trip generation fluctuate throughout the day? What is the project's trip generation for mid-day, later in the evening or weekend conditions? **O8-35**

Assessment 4:

Page 37, Project Parking: A 20 percent reduction in the parking for the site seems to be assumed for the Jobs Creation Overlay Zone (JCOZ). Considering the unique nature of the land uses, does this reduction still apply to the project and, if so, why? **O8-36**

Assessment 5:

Level of Service Analysis Scenarios: The study evaluates existing conditions and project opening year conditions. Considering the significance of the proposed project and the magnitude and nature of the project trips, addition of a long-range conditions analysis is appropriate to evaluate the traffic conditions at full area buildout. **O8-37**

Assessment 6:

State Highway Facilities: Since the project might be considered regionally significant, which we understand there was some comment to that effect, Caltrans should be consulted or involved in development of the scope and review of the traffic study There is on indication that Caltrans was consulted. **O8-38**

Assessment 7:

Page 48, CEQA Impact Analysis & VMT: Based on the VMT analysis, the project is stated to have a home-based work VMT of 14.0 compared to the Citywide impact threshold of 15.7. Is the 15.7 figure, 15% below the City's average, or is it the City average? Based on the threshold on page 47 of the report, projects need to have a VMT of 15% or more below the existing City-wide average to have a non-significant VMT impact.

In Table 10, the VMT impact threshold appears to be listed as 14.0 which is different than the 15.7 mentioned in the text. **O8-39**

Footnote C on Table 10 appears to list the City average as 15.7 for year 2020 and 11.7 for year 2040. Hence, the project VMT of 14.0 might not be 15% or more below the City average, indicating a significant VMT impact under CEQA. The data seems to indicate the threshold to be 13.4 (15.7 X 0.85 = 13.34) which is below the project's VMT of 14.0.

Additionally, per the City of Santa Clarita Transportation Analysis Updates (Fehr & Peers, May 19, 2020), the baseline home-based work VMT for the City is listed as 18.4 for year 2020 and 13.5 for year 2040. **O8-40**

Assessment 8:

Level of Service Analysis Time Frames: The level of service study evaluates traffic conditions during the typical weekday from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

There are schools near the project site, including the Master's College, Hart High School, Placerita Junior High, Old Orchard Elementary School , and Peachland Elementary School. Also, there are well attended Churches in the Canyon and adjoining areas. Typically, when schools are nearby, the study needs to include an analysis of the school traffic and school arrival and release times. It is recommended the analysis time frames be expanded to include school and church l traffic. **O8-41**

As stated on Page 63 of the report, there are two schools located within 0.25 miles of the project site. There is no analysis of the impacts posed by the schools or churches in the Canyon.

Assessment 9:

Vehicular Queue at Driveways: The draft EIR does not indicate whether the empirical data collected at the sample Los Angeles sites include data on vehicular queues at the entrances Since the main access is on 13th Street, adequate storage capacity needs to be provided to keep vehicles from queuing outside the site and onto public right of way. This appears to be unaccounted for. **O8-42**

Assessment 10:

Queue & Level of Service Analysis: The draft EIR does not t assume existing traffic signal timing data based on information provided by the City and Caltrans If optimized traffic signal timing is used, the vehicular queues and level of service probably do not match existing field conditions. **O8-43**

Assessment 11:

Table 11, Project Trips on Ramp Intersections: The table indicates a small number of project trips added to the freeway ramps. Considering the project's peak hour trip generation (605 AM peak hour trips and 684 PM peak hour trips) and the regional access provided via State Route 14 and Interstate 5 Freeways, a larger portion of the project trips will be traveling thorough these ramp intersections. Especially, since the majority of the trips should be coming from outside the City and from the greater Los Angeles and nearby areas. It is recommended, the project trip distribution be revised to reflect a larger portion of project trips at the freeways. **O8-44**

Assessment 12:

Table 12, Vehicular Queues at Ramps: The draft EIR analysis indicates a vehicular queue of between 8 to 43 feet for the ramps during future without and with project conditions. The EIR is devoid of any information on how does this compare to the existing vehicular queues at the ramps/ For instance. are there currently minimal queues present at the ramps during the peak hours? The result showing 8 to 43 feet indicates a queue of one to two vehicles, which appears to be unsupported by the data . **O8-45**

Assessment 13:

Page 67, Project Trip Distribution: The draft EIR failed to provide the source and methodology for determination of project trip distribution assumptions. The report states that the distributions are based on patterns developed in the City's travel demand forecasting model. There is no way to tell whether the distribution for without and with the Dockweiler extension was considered. It cannot be determined if the applicant was using a select zone run with and without the roadway link in the model Further, there is no tie-in or correlation between this project and the construction of the Dockweiler extesnsion even though it appears that many of the assumptions and statistics are based on the actual construction of the Dockweiler extension. At a minimum, the project should not be built until the Dockweiler extension is completed. The draft EIR is devoid of any alternative or interim traffic or evacuation plans in the event the Dockweiler extension is not completed but this project approved and/or constructed. **O8-46**

Assessment 14:

Page 67, Study Intersections: It is recommended the study evaluate the access at Gate 3 to evaluate level of service operations at this driveway. As stated on Page 67, site access driveways should be included for analysis.

Also, the following intersections are recommended to be included in the study (they are not), since I-5 and the 14 Freeway provide regional access to the site from a number of ramp locations: **O8-47**

1. 12th Street / Project Access;
2. I-5 Southbound Ramps / Pico Canyon Road - Lyons Avenue;
3. Main Street / Newhall Avenue Roundabout;
4. I-5 Southbound Ramps / Magic Mountain Parkway;
5. I-5 Northbound Ramps / Magic Mountain Parkway;

6. Town Center Drive / Magic Mountain Parkway;
7. Valencia Boulevard / Magic Mountain Parkway;
8. I-5 Southbound Ramps / Valencia Boulevard;
9. I-5 Northbound Ramps / Valencia Boulevard;
10. Rockwell Canyon Road / Valencia Boulevard;
11. McBean Parkway / Valencia Boulevard;
12. I-5 Southbound Ramps / McBean Parkway;
13. I-5 Northbound Ramps / McBean Parkway;
14. Tournament Road / McBean Parkway;
15. Orchard Village Road / McBean Parkway; and
16. Orchard Village Road / Wiley Canyon Road.

O8-47
Continued

Assessment 15:

Page 68, Existing Traffic Count Data: Based on the report, the existing traffic counts were obtained from older studies from 2017 and 2019 not current counts. More recent traffic count data needs to be utilized. Alternatively, sampling of newer counts should be performed and compared to the data used in the study to ensure its validity.

O8-48

Assessment 16:

Page 68, Future Traffic Volumes: Based on the draft , the future traffic conditions volumes were obtained from the City's traffic model. However, the report did not provide clarification on how the 36 cumulative projects were accounted for in the traffic projections if the data was obtained from a traffic model. Were the cumulative project trips manually assigned to the roadway network?

O8-49

Assessment 17:

Table 16 and Table 17, Existing Plus Project Level of Service: Some of the delays appear to improve with the added trips from the project without explanation or basis. No information is provided on these improvements. Are they due to optimized traffic signal timing, etc.? **O8-50**

Assessment 18:

Table 17, Existing Plus Project Level of Service: A column needs to be added identifying the level of service impacts (yes/no), similar o Table 16. **O8-51**

Assessment 19:

Page 70, Existing Plus Project Level of Service: The report states that with the Railroad Crossing Upgrade, the level of service issue identified at the intersection of Railroad Avenue / 13th Street will be improved to acceptable LOS. If the Railroad Crossing Upgrade is not implemented for any reason, what improvements would be required to achieve acceptable LOS? Also, the report fails to adequately address traffic congestion at the crossing or incidents causing undue delay such as long trains, and the like. **O8-52**

Assessment 20:

Table 18 and 19, Future Conditions Level of Service: Based on the LOS table of results, during future without project conditions, some of the delays at the study intersections, such as Sierra Highway / Newhall Avenue and SR-14 Northbound Ramps / Newhall Avenue appear to improve compared to existing conditions. No information was provided on how these delays are less than existing/current conditions. If the intersection capacity is the same as existing conditions (no improvements assumed), with the additional traffic, the level of service and delay should generally get worse not better. **O8-53**

Assessment 21:

Page 72 & Table 19, Roundabout Analysis: No information on the methodology and software that was used for the roundabout analysis was provided. Considering the magnitude of the project's trip generation, a roundabout might not be suitable. This is also acknowledged on Page 81 pf the report while discussing the limits of the roundabout during emergency evacuation conditions. This limitation might also apply to the roundabout during typical operations due to high traffic volumes. **O8-54**

Assessment 22:

Level of Service Analysis: The study does not include an analysis of future conditions without the Dockweiler extension. It is recommended that a future year analysis without the extension be conducted and included to determine the potential impacts without the roadway extension in place. As stated in page 78 of the report, the implementation of the Dockweiler extension depends on funding availability. That is another reason why these two projects should be linked together. **O8-55**

Assessment 23:

Level of Service Analysis: There is no evidence that he analysis for the 13th Street / Railroad Avenue accounts for the railroad crossing and frequency The railroad crossing limits the capacity of the intersection and results in additional delays which impact level of service and vehicular queues. **O8-56**

Assessment 24:

Dockweiler Extension: The report fails to provide a figure showing the alignment of the Dockweiler Drive extension and how it connects to Placentia Canyon Road. **O8-57**

Assessment 25:

Page 77, Improvement at the Bouquet Canyon Road / Newhall Ranch Road Intersection: The recommended prohibition of westbound U-turn's negatively affects access to the existing land uses and Starbucks located at the southeast corner of the intersection. **O8-58**

Assessment 26:

Page 77, Improvement at the Bouquet Canyon Road / Valencia Boulevard Intersection: Is the recommended addition of a fourth eastbound through lane feasible? There appears to be existing land uses that should prohibit additional pavement widening. **O8-59**

Assessment 27:

Page 78, Improvement at the Sierra Highway / SR-14 Southbound Ramps Intersection: Is the recommended improvement coordinated with Caltrans? There is no evidence that it is. At intersections that are controlled by Caltrans, the improvement would need to be reviewed and planned by Caltrans and might take a long process to implement. Hence, the improvements might not get built or at least not built for a number of years. This fact affects the traffic analysis and further reinforces the need for the project to be linked to the construction of improvements. **O8-60**

Assessment 28:

Page 78, Improvement at the SR-14 Northbound Ramps / Placerita Canyon Road Intersection: Is this recommended improvement also coordinated with Caltrans? At intersections that are controlled by Caltrans, the improvement would need to be reviewed and planned by Caltrans and might take a long process to implement. Hence, the improvements might not get built or at least not built for a number of years. **O8-61**

Assessment 29:

Emergency Access & Evacuation: All project access appears to be via the east property side on and around 12th Street or 13th Street. Considering the large number of persons expected on the site and the size of the site, a secondary/emergency access located on the west side of the site is appropriate. Otherwise, if there is an issue at 12th Street or 13th Street on the east side of the site, there are no other evacuation routes for the site. Emergency evacuation routes need to be analyzed and provided.

If the site had 2,468 parking spaces, there would be a large number of vehicles to evacuate from the site during an emergency condition. **O8-62**

Furthermore, the evacuation analysis appears to depend on and assume on the Dockweiler Drive extension to be in place. As previously noted in Assessment 22, the implementation of this extension depends on funding availability. There are no alternative evacuation plans posed particularly if the Dockweiler extension is not constructed or timely constructed.

Assessment 30:

Figure 10, Project Trip Distribution: Some of the project traffic appears to be absorbed between study intersections, specifically traveling between intersections 7 and 8. There is no data or other evidence supporting this conclusion. **O8-63**

Assessment 31:

Figure 10, Project Trip Distribution: The analysis appears to assume more of the project trips traveling through the City and local streets than traveling to and from the freeways, especially the I-5 Freeway which provides great regional access. Is this a valid assumption considering the workers are mostly coming from outside of Santa Clarita? What percentage of the workers are expected to live in the surrounding neighborhoods? How has this been calculated or what is the basis for this assumption? A greater percentage of trips might need to be assigned to the freeway ramps to more accurately assess project traffic. More traffic should be assigned to the I-5 Freeway than the SR-14 Freeway. **O8-64**

Assessment 32:

Page 156, Construction Traffic: A table is lacking showing the expected trip generation of the construction phase which has the highest number of trips. Also, since trucks occupy more space than passenger vehicles, it is recommended the truck trips be converted to passenger car equivalents (PCE) using a factor of 2.0. This will assist the user in understanding the number of trips generated by the project construction phase and compare to project operations. **O8-65**

Shadowbox Studios Parking Analysis Form (Gibson Transportation Consulting, Inc., December 20, 2022) Review Assessments:

Assessment 33:

Table 1, Parking Demand Calculations: The parking analysis appears to base the parking demand for the studio-related uses on light manufacturing use. No explanation was provided on why this use is appropriate. It is recommended the parking be based on study of similar sites and studios. **O8-66**

Assessment 34:

Parking Demand Calculations: The parking analysis appears to assume shared parking conditions for the proposed uses. Since the food service parking rate is reduced to only account for employee parking, is a shared parking between the food service uses and the rest of the uses applicable? What is the basis for this comparison?

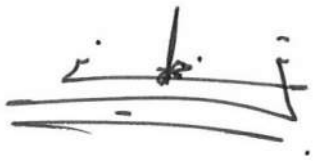
Also, shared parking can result in longer parking turnover times. Hence, parking spaces can be expected to be occupied for a longer than usual time, affecting parking demand. **O8-67**

Furthermore, what is the source for the time of day parking demand of the studio uses?

MAT Engineering Inc. appreciates the opportunity to provide this review. If you have any questions, please contact us at 949-344-1828 or at@matengineering.com.

Respectfully submitted,

MAT ENGINEERING, INC.



Alex Tabrizi, PE, TE

President

ALEX TABRIZI, PE, TE

President

Alex Tabrizi, PE, TE is a licensed civil engineer and licensed traffic engineer in the State of California and serves as the founding president of MAT Engineering, Inc. Mr. Tabrizi has worked professionally in the field traffic engineering and transportation planning/engineering since 2003. He received his bachelors of science degree in civil engineering with an emphasis on structural engineering from the University of California, Irvine.

Mr. Tabrizi has extensive experience in providing transportation planning and engineering consulting services and expertise to a wide range of clients including private sector, land developers, public agencies, various districts of California Department of Transportation (Caltrans), and local governments. Mr. Tabrizi has completed and supervised preparation of hundreds of complex transportation planning and parking demand/utilization studies with successful track record in providing innovative, cost-effective and practical technical consulting services and solutions for politically sensitive, complex, and unique projects involving numerous stakeholders and requiring to meet accelerated project schedules.

As an Expert consultant to the California Board for Professional Engineers, Land Surveyors, and Geologists, Mr. Tabrizi assists the Board with development, maintenance, and validation of material for the Board's professional licensing examinations.

Mr. Tabrizi is also a member of the Traffic Engineering Occupational Analysis Task Force assisting the State's Board of Engineers in determining descriptive information about the tasks performed by Traffic Engineers in the industry and the knowledge standards required to adequately perform those tasks.

Mr. Tabrizi has performed transportation planning studies dealing with various stages of project development, such as signal warrant analysis, circulation analysis, full traffic impact analysis, roundabout analysis and parking studies. He has prepared traffic flow visual simulations combining measured vehicular and pedestrian volumes with aerial imagery to show existing and future traffic circulation for public understanding and discussion. Mr. Tabrizi has also completed a number of transportation engineering and roadway design projects ranging from preparing preliminary studies and reports such as Caltrans Project Reports (PR) and City street improvement concepts to final construction plans, specifications, and cost estimates for Caltrans highway improvement projects.

Mr. Tabrizi is knowledgeable in computer applications for transportation engineering and planning, including, AutoCAD, Microstation with InRoads, Traffix, HCS, Synchro/ SimTraffic, and aaSIDRA.

Registration:

2011, Civil Engineer, CA, 78923

2014, Traffic Engineer, CA 2722

Years of Experience: 18

Education:

B.S., 2005, Civil Engineering, University of California, Irvine

Certifications:

ASCE, On-Site Circulation Design

ITE, Intersection Safety and Geometric Design - Sight Distance

SIDRA, Roundabout Analysis

Professional History:

MAT Engineering, Inc. – President, Present

California Board for Professional Engineers, Land Surveyors & Geologists - Expert Consultant & Traffic Engineering Occupational Task Force Member, 2016-Present

RK Engineering Group, Inc. – Principal, 2014-2022

RBF Consulting – Associate, 2005-2014

Urban Crossroads, Inc. - Engineering Aide, 2003-2005

Areas of Expertise:

Transportation Planning & Engineering

Traffic Impact Analysis

Vehicle Miles Traveled (VMT) Analysis

Engineering & Traffic Survey (ET&S) Studies (Establishing Speed Limits)

Traffic Engineering

Transportation Demand Management Plans & Strategies

Due Diligence Studies

Traffic Signal Timing & Progression Analysis

Site Access, Wayfinding & Circulation System Design & Review

Project & Infrastructure Phasing

Roundabout Analysis

Traffic Control Device Warrants

Traffic Calming & Traffic Safety Studies

Parking Demand Studies & Parking Lot Design

Relevant Experience:

- City of Aliso Viejo On-Call Services (Aliso Viejo, CA)
- City of Costa Mesa On-Call Services (Costa Mesa, CA)
- City of Perris On-Call Services (Perris, CA)
- Redlands City-Wide Engineering & Traffic Survey (ET&S)
- Corona de Mar / Coast Highway Bypass Traffic Review (Newport Beach, CA)
- Dover Shores & Mariners Traffic Review (Newport Beach, CA)
- Marymount College Facilities Expansion EIR (Rancho Palos Verdes, CA)
- Murrieta Hills Residential & Commercial Specific Plan (Murrieta, CA)
- Ridgeline Apartments (San Bernardino, CA)
- TTM 15731 (Highland, CA)
- TTM 19992 (Rancho Cucamonga, CA)
- Oxnard Village SP (Oxnard, CA)
- Lost Canyons Residential & Golf Club (Simi Valley, CA)
- Vantis Live/Work & Apartments (Aliso Viejo, CA)
- Palmdale TOD Transit Village (Palmdale, CA)
- Fox Plaza Mixed Use Traffic & Parking Analysis (Riverside, CA)

Relevant Experience (Continued):

- Lambert Ranch Traffic Impact Analysis (Irvine, CA)
- 301 East Jeanette Lane Residential Project (Santa Ana, CA)
- Metro Goldwyn Mayer (MGM) Office Building (Beverly Hills, CA)
- Moorpark Studios West - Largest Independent Movie Studios in the US (Moorpark, CA)
- City of La Habra City-Wide Engineering & Traffic Survey
- City of Upland City-Wide Engineering & Traffic Survey
- City of Upland City-Wide Traffic Signal & Equipment Review
- Indian Wells Tennis Garden Stadium (Indian Wells, CA)
- Casino San Pablo Traffic Analysis (San Pablo, CA)
- Glendale Galleria Traffic & Parking Support (Glendale, CA)
- Galleria at Tyler Expansion Project (Riverside, CA)
- The Shops at Tanforan Site Circulation & Wayfinding (San Bruno, CA)
- The Boulevards at South Bay On-Site Circulation (Carson, CA)
- Hilton Garden Inn Hotel (Irvine, CA)
- Raytheon South Campus Specific Plan (El Segundo, CA)
- In-N-Out Restaurant (El Segundo, CA)
- Porsche Experience Center (Carson, CA)
- Downtown Summer Festival Parking Management Plan (Laguna Beach, CA)
- Trabuco Road Corridor Analysis (Irvine, CA)
- University Drive Street Improvements (Irvine, CA)
- Main Street Downtown Merge Relocation & Street Improvements (Fort Bragg, CA)
- Perris Bicycle & Trail Master Plan (Perris, CA)
- Campus Pointe / Chestnut Avenue Roundabout Analysis (Fresno, CA)
- Walmart (Rialto, CA)
- State Route 1 / Marina Highway Roundabout Analysis (Marina, CA)
- State Route 217 / Hollister Avenue Interchange Roundabout Analysis (Goleta, CA)
- City of Brawley Non-Motorized Transportation Plan (Brawley, CA)
- Alesandro Boulevard Corridor Implementation Project Traffic Analysis (Moreno Valley, CA)
- State Route 57 Northbound Widening Traffic Analysis (Caltrans District 12)
- Mater Dei High School Expansion (Santa Ana, CA)

Relevant Experience (Continued):

- Interstate 15 / State Route 79 South Interchange Improvement Design Project (Riverside County, CA)
- Interstate 5 HOV Lane Extension Project (Caltrans)
- La Pata Avenue Gap Closure & Camino Del Rio Extension Project (Orange County, CA)
- Bloomington Phase 1 Traffic Impact Analysis (County of San Bernardino, CA)
- Bell Business Center Traffic Impact Analysis (Bell, CA)

Resolute Associates LLC
FROM VISION TO ACTION

May 20, 2023

Erika Iverson, Senior Planner
City of Santa Clarita Planning Division
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

Subject: Response to NOA for Shadowbox Studios Project Draft EIR

Dear Ms. Iverson,

Thank you for the opportunity to comment on the Draft EIR for the proposed Shadowbox Studios project.

Introduction

The focus of my limited review of the Draft EIR is on fire safety and the impacts of a wildfire burning in the Wildland Urban Interface (WUI) that could threaten the Shadowbox Studios project (Project). Most importantly, I focused on the impacts the project will have on exasperating the wildland fire threat to the neighboring communities, specifically Placerita Canyon and Circle J neighborhoods.

The Placerita Canyon and Circle J communities were developed prior to the rigorous WUI fire codes that are now in place and will be required of this Project. The most significant impact to the communities is the Project's compounding threat to these already inadequate evacuation routes and the extreme threat from wildfire which continues to get worse. These communities have limited egress during an evacuation, there are long dead-end roads, and the structures are not built with hardening to prevent flame impingement and ember intrusion. **O8-68**

In section 4.8 Hazards and Hazardous Materials, the EIR asks; *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?* And then determines that the impacts to be less than significant and therefore, no mitigations measures are required. I believe that this determination requires further analysis of the Project's neighboring communities of Placerita Canyon and Circle J. Upon further analysis, I am confident it will be determined that the impact on the community will be significant and will require mitigations including requiring the Dockweiler Extension be completed as part of the first phase of the project. Additionally, further analysis should be done to identify possible road interconnections that will reduce the long evacuation time and reduce the dead-end road situation within the communities. **O8-69**

As part of the review, I am including a fire behavior analysis completed by Tim Chavez who is a fully qualified Fire Behavior Analysist with decades of experience modeling fire behavior on California wildfires. His study further corroborates, along with the fire behavior analysis contained in the EIR, the significant threat that wildfires pose to the neighborhoods adjoining this project. His report is attached to this letter. **O8-70**

Historical Fires

The Santa Clarita area is recognized by California's seasoned wildland fire commanders as an area for large, destructive and deadly fires. Historically, wildland fires most often occur in the **O8-71**

same areas over and over. One can look back at history and see countless major fires that have burned in and around the Santa Clarita Valley. Listed are some of the significant fires that have occurred since 1960.[1]

- New Hall Fire 1962 – 8,583 acres, 15 structures destroyed
- Clampitt Fire 1970 -115,537 acres, 86 homes destroyed, 4 fatalities
- Agua Dulce Fire 1970 – 21,756 acres
- Sayre Fire 2008 – 11,221 acres, 604 structures destroyed
- Buckweed Fire 2007 – 37,804 acres, 63 structures destroyed
- Ranch Fire 2007 – 41,523 acres,10 structures destroyed
- Sand Fire 2016 - 41,432 acres, 18 homes destroyed, 2 fatalities
- Rye Fire 2017– 6,049 acres, 6 structures destroyed

The EIR identifies that the average interval between wildfires within 5 miles of the project site is less than 1 year. This is a very high fire frequency rate.

The fire history, as corroborated by the EIR, clearly indicates that destructive wildfires will continue to threaten the Project area and the neighboring communities of Placerita Canyon and Circle J.


Sanatorium Burns, Patients Given Aid

Gene Autry's Melody Ranch Left in Ruins

O8-71
Continued

Based on an analysis of the fire history data set, specifically, the years in which the fires burned, the average interval between wildfires within 5 miles of the Project site was calculated to be less than 1 year with intervals ranging between 0 (multiple fires in the same year) to 8 years. Based on the analysis, it is expected that there will be wildland fires within 5 miles of the Project site at least every 8 years and on average, every year, as observed in the fire history record. Based on fire history, wildfire risk for the Project site is associated primarily with a Santa Ana wind-driven wildfire burning or spotting on-site from the north or east, although a fire approaching from the south during more typical on-shore weather patterns is possible. The proximity of the Project to large expanses of open space to the east (Quigley Canyon Open Space) and southeast (Placerita Canyon), has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the Project vicinity. – Appendix N, page 18

[1] http://www.laalmanac.com/fire/fi07.php & https://firemap.sdsc.edu/

Fire History from 1960 to 2023

O8-71
Continued

1962 the Newhall Fire articles:
https://scvhistory.com/scvhistory/lw2989.htm
https://scvhistory.com/scvhistory/ap0837.htm

Fire Behavior Analysis

O8-72

On page 41 in Appendix N the fire behavior analysis is focused on the impacts of a wildfire on the Project site and not on the neighboring communities. Therefore, inference must be applied to understand the impacts a wildfire will have on the neighboring communities and then a determination on what impact a wildfire will have. This is important and must be considered to determine what improvements this project should include that will mitigate what should be significant impacts on the neighboring community.

As the EIR correctly states this project is located and is surrounded by areas designated Very High Fire Hazard Severity Zone (VHFHSZ) by the State of California. This means that the wildland fire environment factors include steep and broken topography, volatile vegetation, and frequent weather conditions conducive to extreme fire behavior.

Further, the fire behavior analysis included in the EIR in Appendix N **does** accurately corroborate that extreme wildland fire behavior, usually under Santa Ana wind conditions, frequently occurs in the area around the Project. Because of these conditions the project is required to be built under the strict Wildland Urban

Melody Ranch - Newhall Fire

August 28, 1962 — Gene Autry's Melody Ranch movie town burns to the ground as flames engulf most of the hills surrounding the Santa Clarita Valley.

The first blaze broke out just after noon in Hasley Canyon, north of Castaic Junction. The second broke out an hour later near the Circle J Ranch between Newhall and Saugus. High winds whipped the flames into the most intense inferno anyone had ever seen.

When the smoke cleared three days later, 17,200 acres had been scorched and 15 structures and numerous out-buildings were lost. No one was killed, but the Western street at Melody Ranch was gone.

"I had always planned to erect a Western museum there," Autry remembered in 1995, "but priceless Indian relics and a collection of rare guns, including a set used by Billy the Kid, went up in smoke. Thank God, the ranch hands and all 14 of our horses were uninjured."

O8-71
Continued

Interface fire regulations required by the City of Santa Clarita and the State of California. Unfortunately, that same extreme fire behavior identified by the analysis also affects the neighboring communities in the same manner, except the residents of these older communities, having been developed decades ago, do not have the benefit of the current fire regulations for new developments and construction to protect them.

State of California Fire Hazard Severity Zone Map of the Project Area

O8-72
Continued

Further evidence of the extreme fire behavior is included in the Fire Behavior Analysis attached to this letter completed by Fire Behavior Analyst Tim Chavez. He identifies that the fire rate of spread can be up to 5 mph and spot fires from burning firebrands can be expected to be prolific and frequent, regularly reaching 1500' ahead of the fire front, further increasing the fires rate of spread downwind. These are extreme fire behavior conditions that can be deadly.

With this Project, a fire threatening these communities will now be further impacted during an evacuation with the additional 2,400 employees that will increase traffic without requiring mitigations prior to construction.

Evacuation

While the EIR correctly demonstrates that the evacuation of the Project site itself will be adequately addressed, it also demonstrates the unacceptable inadequacy of a rapid evacuation of the neighboring communities, requiring 2.6 hours to fully evacuate. This is compounded by extreme fire behavior conditions that can spread a fire at 4.7 mph.

The EIR contains a comprehensive evacuation study by Gibson Transportation Consulting. The study correctly includes not just the evacuation of the Project, it also includes the evacuation of the "evacuation shed" bounded by the area south of Parvin Drive on the north, Quigley Canyon Road and Melody Movie Ranch on the east, the Master's University campus and Placerita Canyon Road on the south, and Railroad Avenue on the west.

O8-73

It could be argued that the evacuation shed should include the neighborhood all the way to the Sierra Highway as that area also requires two means of egress, thus sending those residents west on Placerita Canyon Rd.

The methodology utilized in the Wildfire Section 4.17 states that, "*The analysis also considered the modifications to the Dockweiler Drive Extension Project…"* It is clear from the traffic study that evacuation times are cut in half for the Project's neighboring communities **only if** the Dockweiler Drive extension is completed. Yet throughout the EIR it is always referred to as a "future project."

The mitigation identified by the Evacuation Traffic Study, **but not included as a requirement** of this Project is the Dockweiler Drive extension or corridor. As stated, it is identified as a **future**

> *Traffic Study Conclusion – page 5*
>
> *As shown in Figure 6, the improved Dockweiler Corridor would facilitate the evacuation of the Placerita Canyon Area by reducing the evacuation congestion period at Arch Street & 12th Street & Dockweiler Drive from 2.6 hours under Existing Conditions to 2.2 hours under Future with Project (Roundabout) Conditions and 1.5 hours under Future with Project (Traffic Signal) Conditions. Further, average travel times through the Dockweiler Corridor would be greatly reduced for vehicles evacuating the Placerita Canyon Area, from 27 minutes under Existing Conditions to under 18 minutes under Future with Project (Roundabout) Conditions and under 16 minutes in the Future with Project (Traffic Signal) Conditions. Thus, the traffic signal intersection design would provide for the most efficient traffic operations under an evacuation scenario.*

O8-74

project. The Dockweiler Drive extension should be required as the first phase of this Project and completed before the impacts of the Project are realized.

Other mitigations that should be considered to improve emergency evacuation of the neighboring communities should be the identification of interconnection routes that might provide egress from a neighborhood to safety. This could include connecting the Circle J neighborhood to the Placerita Canyon neighborhood, thus reducing the existing long dead-end road situations.

Large Animal Evacuation

O8-75

There is no mention of large animal evacuation in the EIR, including in the evacuation traffic study. It is well understood that evacuation of horses and other large animals takes time, specialized equipment and training. Large animal evacuation teams coming in during an evacuation with trailers and the time and congestion caused from loading up and transporting horse trailers all will be an impact. It is also understood that many people faced with immediate evacuation will delay or refuse to evacuate if they are unable to evacuate their pets, including horses and other animals. The Project's neighboring communities are locations where many people have horses and other livestock. It would be prudent to include in the evacuation traffic study the impacts of large animal evacuation.

Sand Fire horse evacuation - photo by Sydney Croasmun

Emergency Access

Transportation Section 4.14, page 20 Threshold 4.14(d) Would the Project result in inadequate emergency access?

Emergency access or ingress is the ability for first responders to be able to access a site and a neighborhood. The L.A. County Fire target response times are 8 minutes for suburban areas. This is currently achievable to the communities during normal travel conditions and validated by the traffic study. The evacuation traffic study does recognize that access to the area would be prohibited during an emergency evacuation conditions. The important question to ask **is not**

> *The Existing Conditions volumes utilize the existing afternoon peak hour volumes for north-south traffic on Railroad Avenue and assume that, under emergency evacuation conditions, the traffic on Railroad Avenue and Dockweiler Drive would be prohibited from entering the area. - page 3 transportation study*

included in this study, *during an evacuation of the Placerita Canyon and Circle J communities will the fire department be able to make access into the communities as people are fleeing from an emergency?* Further, *is that situation further impacted by this Project?*

O8-76

Pre-Construction

The fire code requires that prior to construction a project must complete fire access. Further L.A. County Fire recommends in the EIR *that prior to bringing lumber or combustible materials onto the project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones established.*

While the code applies to new construction, specifically this Project, it demonstrates the importance of fire department access before construction when combustible materials are underway.

A nexus should be made that while the roads in the surrounding communities are established, they have long been viewed as inadequate compared to if they had been built to modern fire safety regulations. This will be further exasperated by the significant addition of the 2,400 employees of the Shadow Studio who will further add to emergency evacuation impacts to the egress routes during an emergency. Therefore, it would be an important mitigation that prior to construction of the Project, installation of the Dockweiler Extension be completed to significantly improve the evacuation rate of the neighboring communities.

> Fire Code Chapter 501.4 Timing of Installation
>
> Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Section 505.2.

O8-77

Round-About

The evacuation traffic study determined that a signaled intersection at the future intersection of Dockweiler Drive and 12th Street would improve evacuation times for the average vehicle evacuating from 22 minutes to 16 minutes for a signaled intersection and to 18 minutes for a

O8-78

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roundabout. Therefore, it suggests that a signaled intersection is superior to a roundabout. While the models may indicate this, anecdotal evidence suggests that during an evacuation a signaled intersection that is not controlled by a traffic officer may well cause a logjam as vehicles wait for the signal to change allowing them to exit the dangerous evacuation area. A roundabout will provide for a continued flow of vehicles from all exits. It is suggested that this concern be further reviewed.

O8-78
Continued

Conclusion

This Project will impact the ability for both the neighboring communities to quickly evacuate as well as simultaneously allow emergency responder ingress into the neighborhoods. Our analysis is that without the Dockweiler Drive extension installed as part of the first phase, the Project's impact on the communities is significant and the EIR should reflect that.

The report says a fire can spread 4.7 mph and that the Placerita Canyon residents will average 27 minutes to evacuate (however, it did not indicate what location they are evacuating to). If we consider a travel distance of 1 mile to evacuate by vehicle, this is about 2 mph. The Dockweiler Drive extension will reduce the evacuation time to 16 minutes or about 4 mph, and improvement of the average evacuation time by a vehicle to twice as fast, still not as fast as the potential spread of a Santa Ana driven wildfire, but a significant improvement and could clearly improve survivability during an evacuation. Are there other emergency egress routes that could also improve survivability during a fast moving wildfire?

The following thresholds have all been "determined to be less than significant without mitigation:"

O8-79

- *Threshold 4.8(f): Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*
- *Threshold 4.8(g): Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*
- *Threshold 4.14(d): Would the Project result in inadequate emergency access?*
- *Threshold 4.17(a): Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- *Threshold 4.17(b): Would the Project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- *Threshold 4.17(c): Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

These thresholds all rely on the Dockweiler Drive extension being part of the Project, yet it only is included as part of the Project as a future improvement. This is confusing as to when it will be in place. My analysis indicates that the Dockweiler Drive extension must be completed prior to the construction of the Project, otherwise some, or all, of the thresholds listed above are impacted by the Project and must require mitigation.

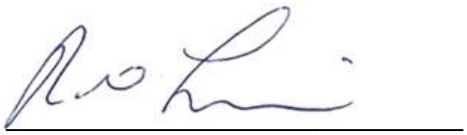
As part of the evacuation traffic study, we recommend that if it was not considered, that large animals be included as part of the study's modeling. **O8-80**

We also recommend a review of the determination of whether the Dockweiler Drive and 12th Street intersection could be more effective as a roundabout instead of a signaled intersection. **O8-81**

For information about my background, please go to our website at https://resoluteassoc.com/associates

Please do not hesitate to contact me.

Sincerely,



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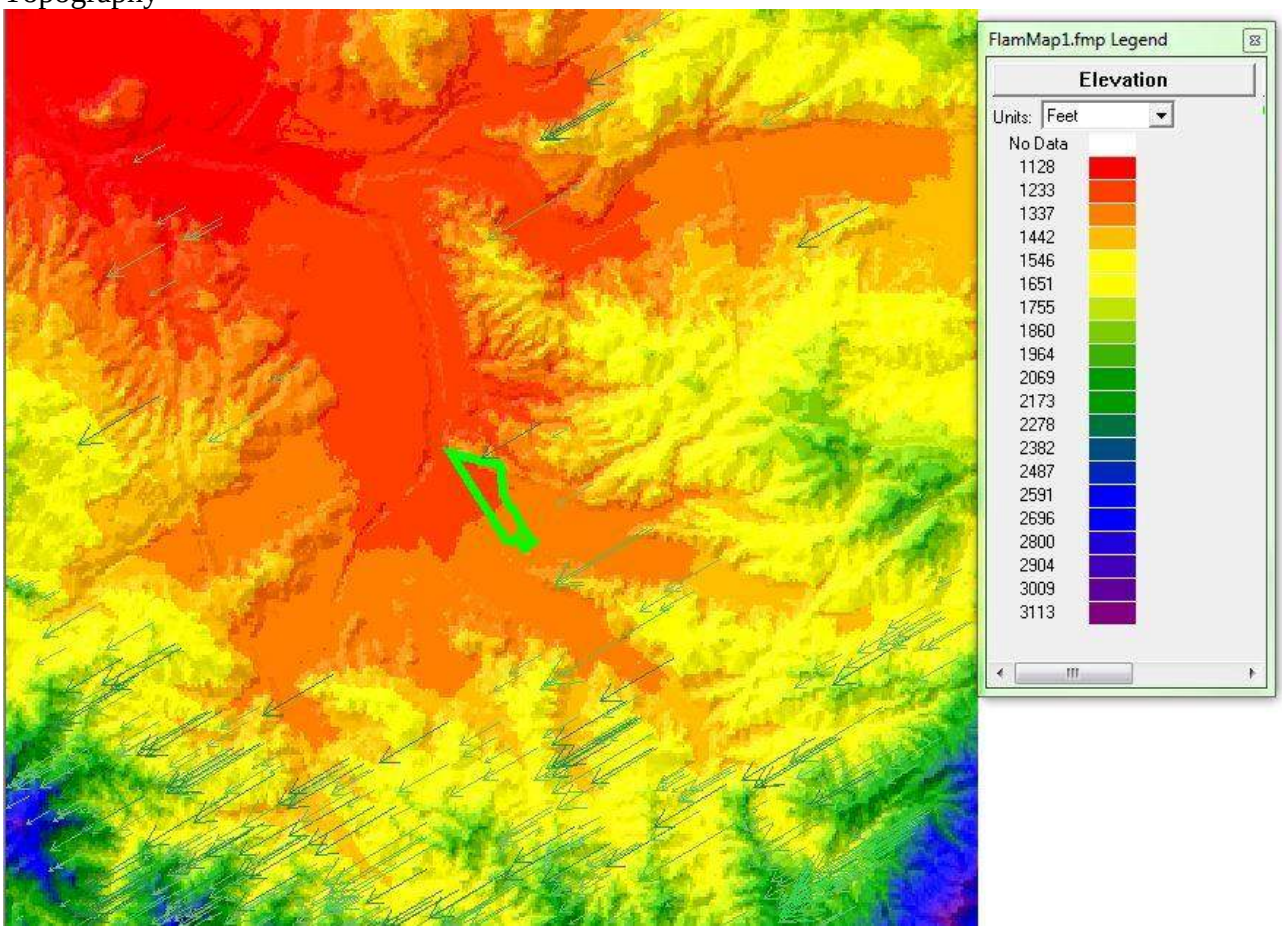
Attachment: Shadowbox Fire Behavior Analysis by Tim Chavez

Shadowbox Fire Behavior Analysis

Prepared by Tim Chavez, Fire Behavior Analyst
May 20, 2023

The Saugus-Newhall area of Southern California has unique and severe fire behavior conditions. Winds are strong almost every afternoon, and north winds along the I-5 corridor often occur in the spring and fall. Exceptionally strong Santa Ana winds occur in the fall and winter out of the north and northeast that can produce gusts stronger than 50 mph at times.

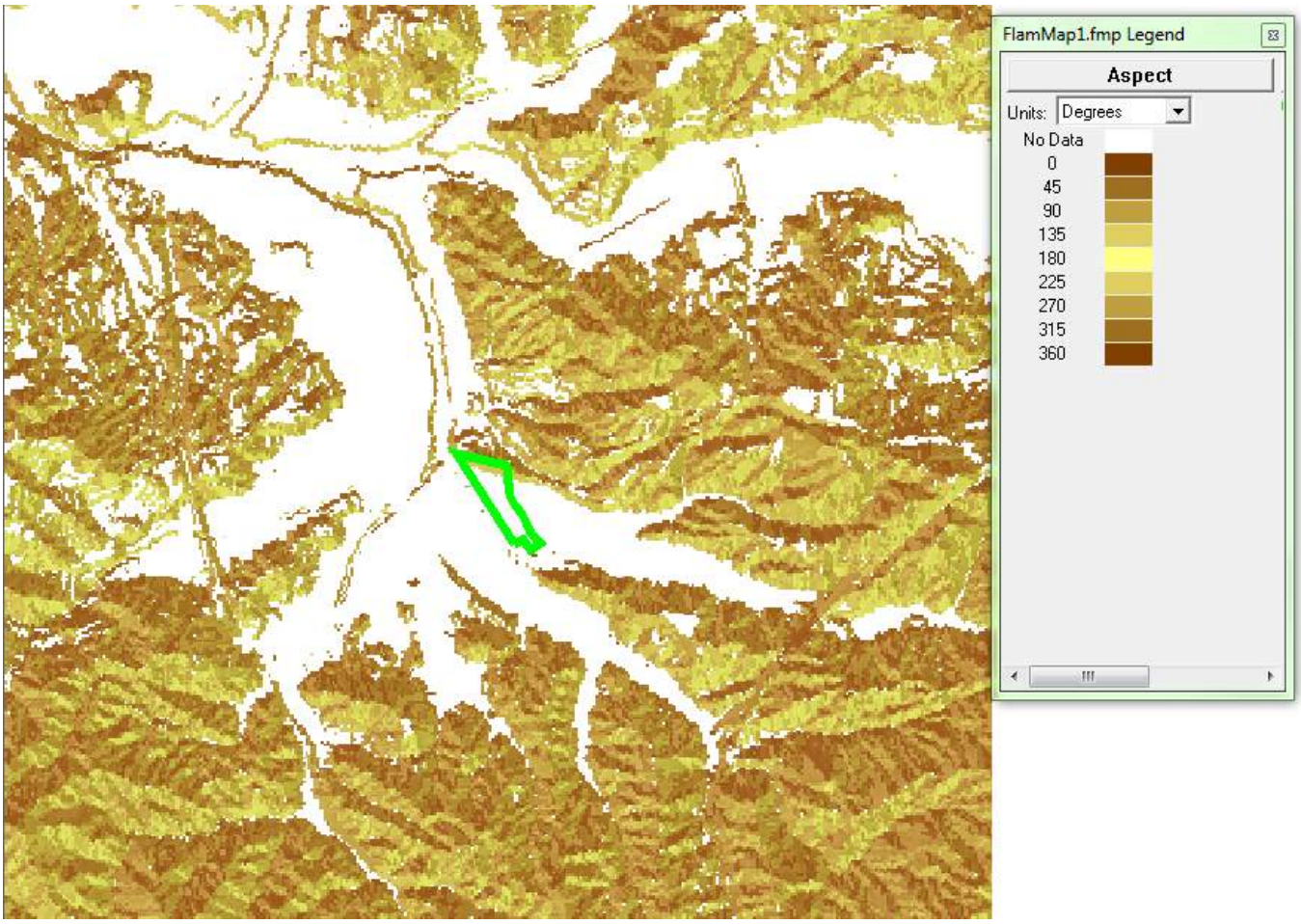
Topography



The terrain is heavily dissected with deep and steep canyons that are often oriented with the wind to produce spectacular rapid and intense fire spread.

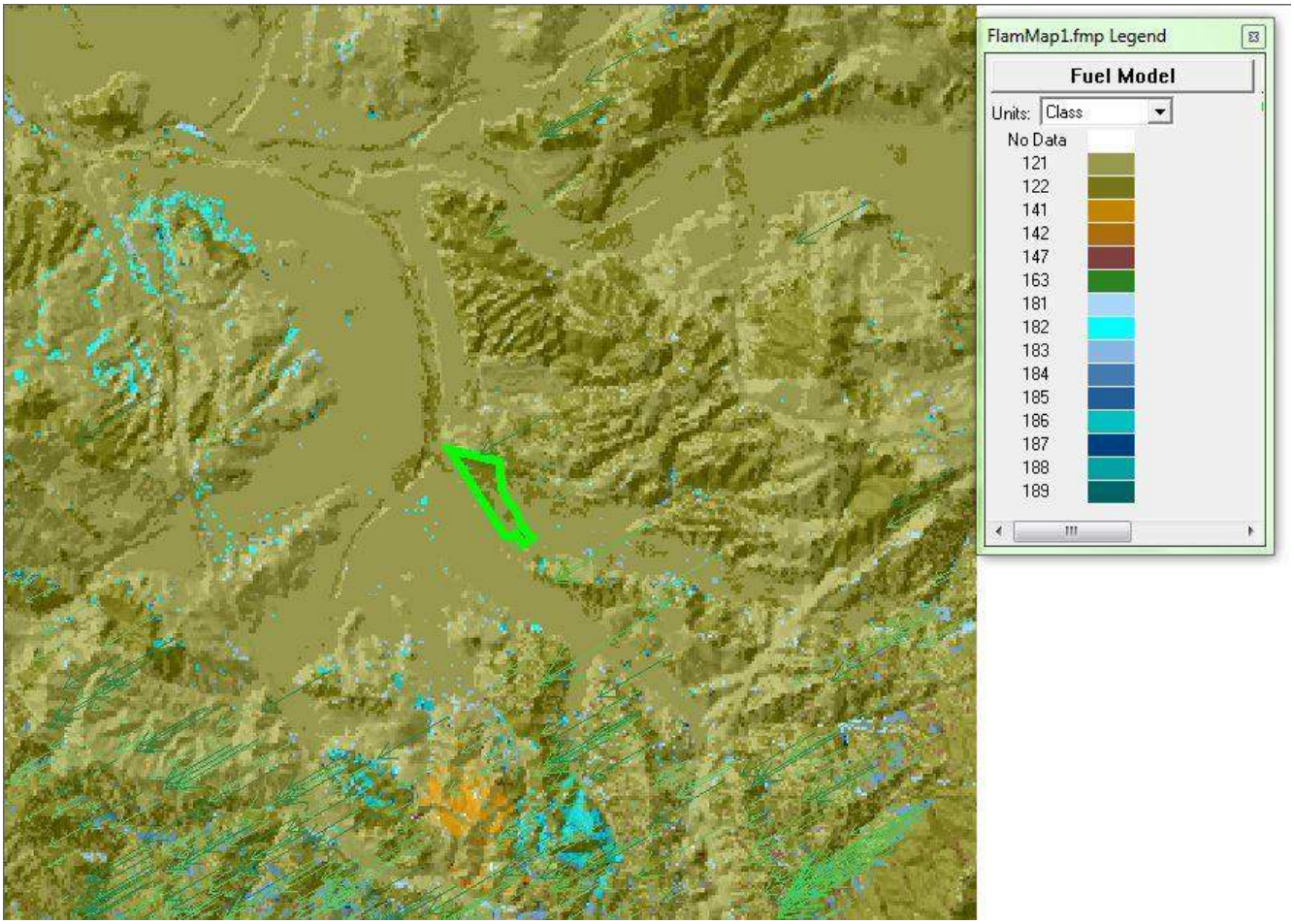
O8-82

O8-82
Continued



Aspect or the orientation of slopes in the area are predominantly facing northeast (45) or southwest (225).

O8-82
Continued



Fuels in the area of the project are dominated by coastal sage scrub 2-4' in height, indicated in the map above as 121 or 122. Some oak woodland and heavier brush are minor components in the area. (Fuel Model numbers are from Scoot and Burgan 2005).

An analysis of the wind direction and speeds from 10 years of data at the Saugus Remote Automatic Weather Station presented as a wind rose shows the strongest winds are from the north-northeast at greater than 47 mph at times.

O8-82
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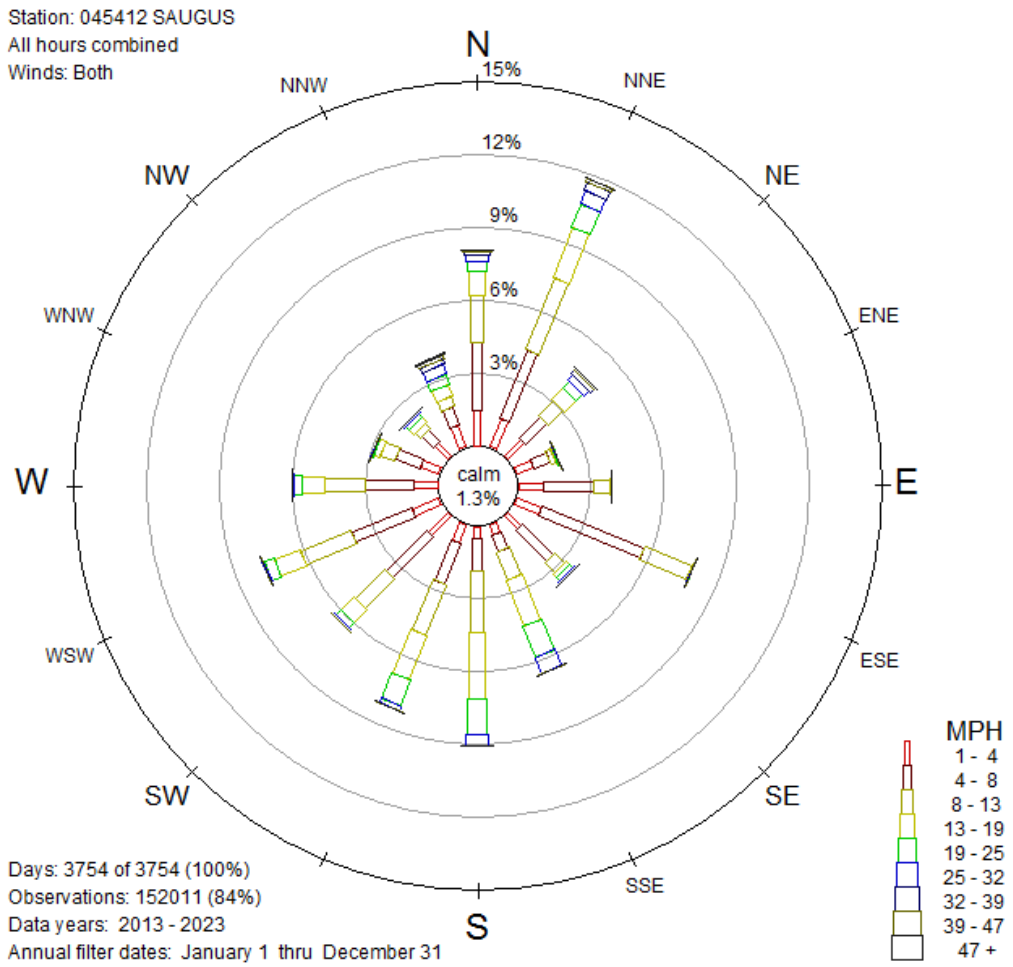
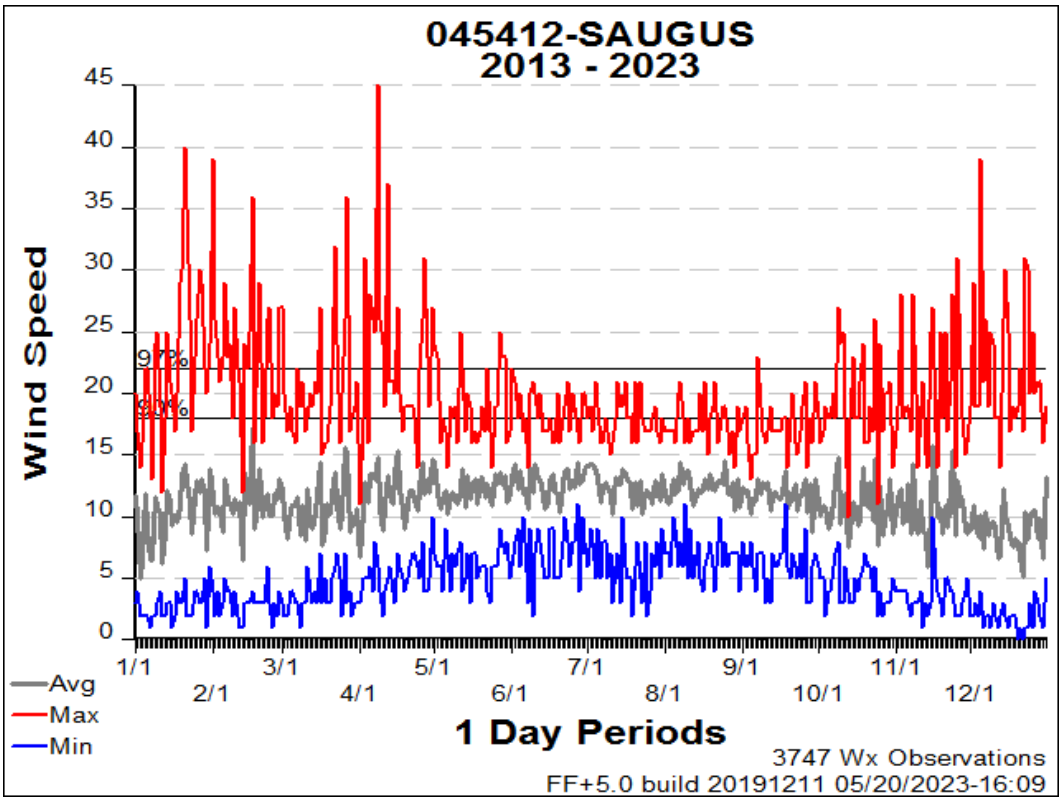
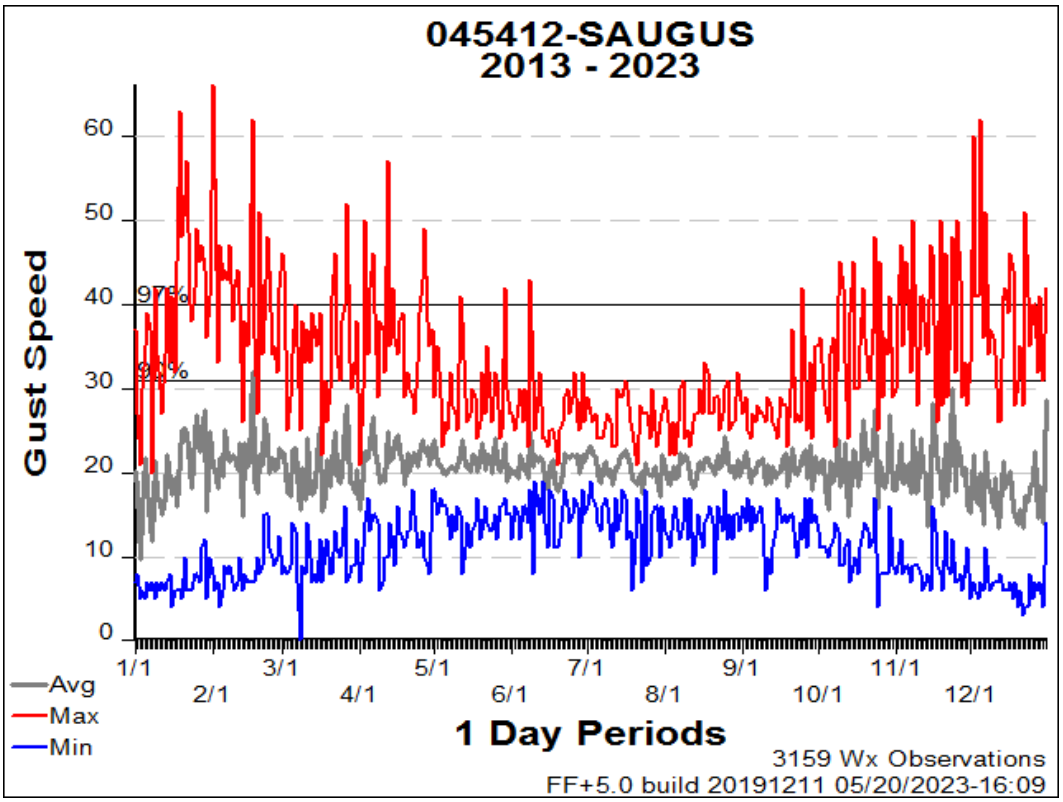


Wind speeds and gusts can also be represented over the year from this data:

Saugus RAWS information:

Station	NFDRS #	Owner		Forecast Zone	Lat/Lon		Elev
SAUGUS	45412	L Gov	LAC	505	34.4250000	-118.0086111	1450





O8-82
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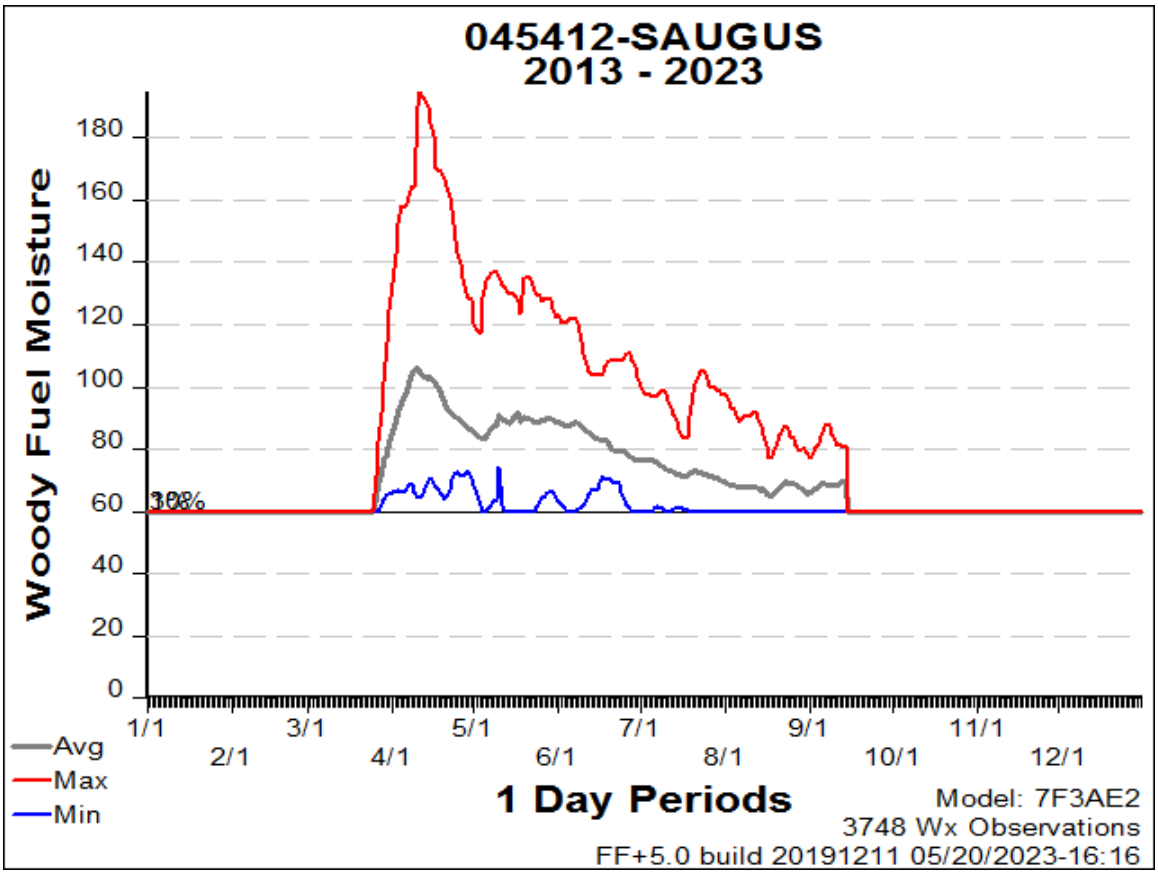
As shown in the time series graphics, the strongest winds, above the 90th percentile, occur from late September until April. The period from September until December is of greatest concern in terms of fire behavior because the live fuel moistures from the chaparral fuels are also at their lowest points. Grasses are also fully cured and are 100% available fuel. The combination of the two conditions leads to often explosive fire behavior.



Therefore the scenario of most concern is a late season wind driven fire originating from north and/or east of the Shadowbox location.

Geospatial fire behavior analysis of the resultant fire behavior in the area of the Shadowbox location is shown below.

Worst case scenario conditions:

Live fuel moisture 60% in chaparral fuels
Grasses fully cured
Dead fuel moisture fuel size 0-1/4"=3%,
1/4-1" =4%
1-3"=5%
slope steepness varies by terrain
wind speed= gusting to 65 mph (recorded gust at Saugus on 12/5/2017)

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DATE          GSpd
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O8-82
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02/01/2016    66.00
12/02/2016    60.00
02/17/2017    62.00
03/27/2017    52.00
12/05/2017    62.00
04/12/2018    57.00
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12/07/2020    51.00
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01/19/2021    63.00
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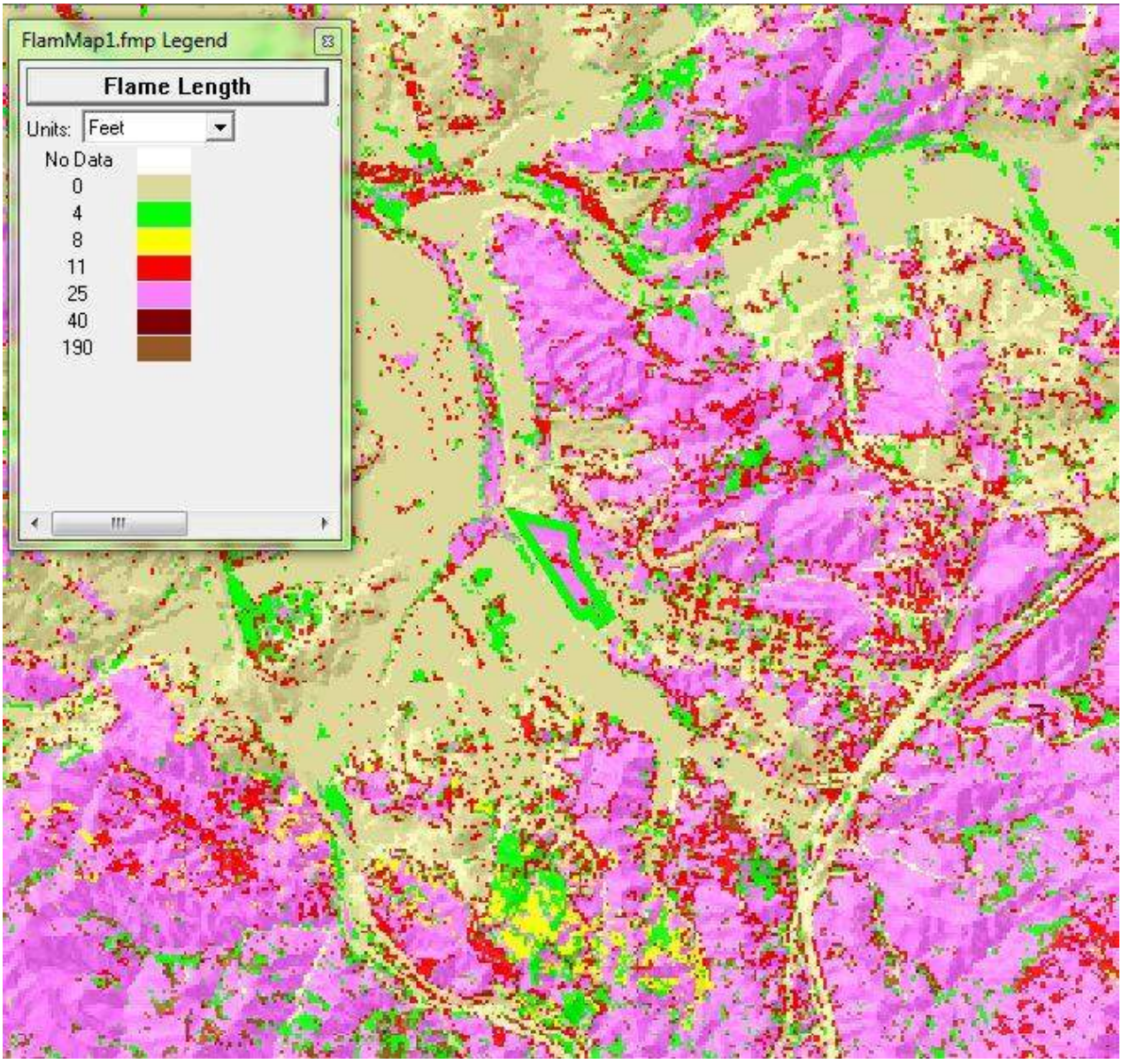

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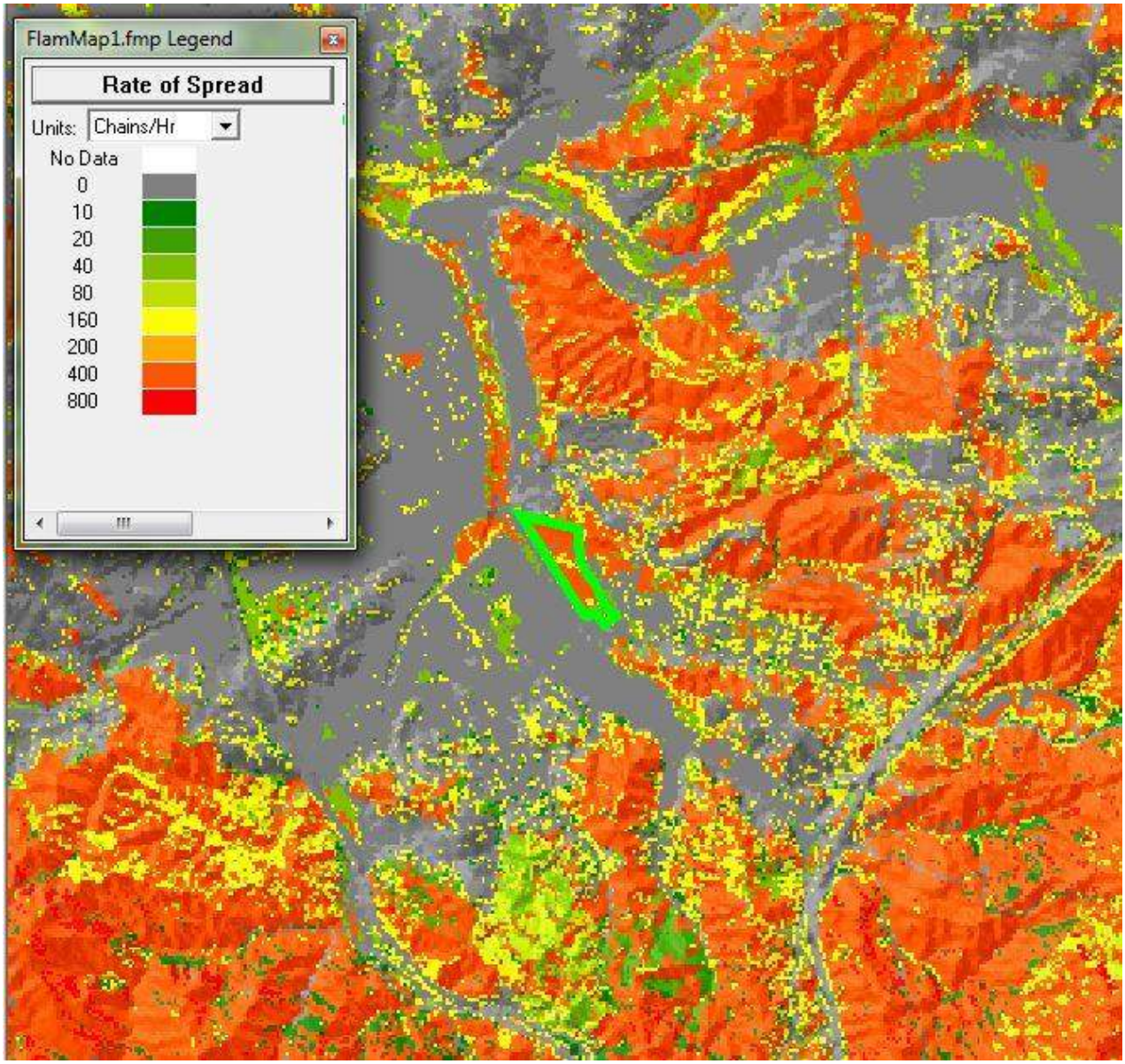

O8-82
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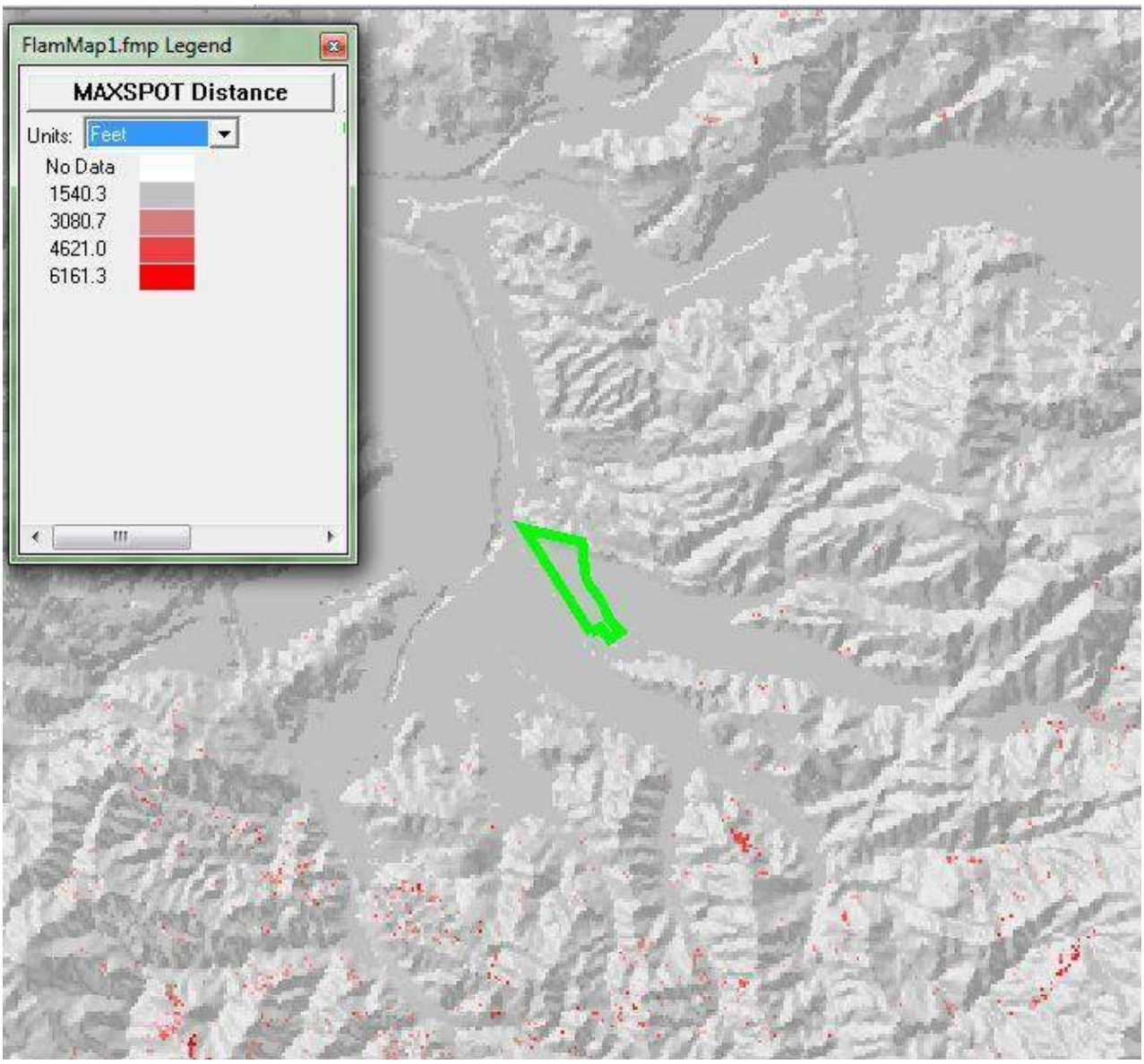
Flame lengths near 20-25' will emanate from the fuelbed directly to the north and east under any wind conditions greater than 25mph. As the fire approached the area, the rate of spread could be up to 200-400 chains/hour (2.5-5 mph). Warning time for evacuations would depend on early warning of an upwind fire start location and good location data of the fire front location (which is often lacking in the early stages of a fire).

Spot fires from burning firebrands can be expected to be prolific and frequent, regularly reaching 1500' ahead of the fire front, further increasing the fires rate of spread downwind.



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EDUCATION

2013: Executive Leadership Program
CENTER FOR HOMELAND DEFENSE & SECURITY
NAVAL POST-GRADUATE SCHOOL
Monterey, CA

1993: Bachelor of Arts, Political Science
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA

1983: Associate of Science, Fire Science
ALLAN HANCOCK COLLEGE
Santa Maria, CA

INCIDENT MANAGEMENT ROLES

Incident Commander, IMT 10

Deputy Incident Commander, IMT 9

Operations Section Chief, IMT 8

Planning Section Chief, IMT 8 & 10

CURRENT/FORMER AFFILIATIONS

Red Cross Board of Director Pacific Division

International Assoc. of Emergency Mgrs.

SLO & SBC Fire Safe Councils

CAL Chiefs Association

Southern CA Foresters & Fire Wardens

EMSA Operations Committee

Ambulance Performance Ops Committee

Incident Management Team Committee

SLO County Fire Chiefs Association

Resolute Associates LLC
FROM VISION TO ACTION

Experienced Fire Chief, Director and Consultant with a leadership and management style that supports and inspires excellence from others and promotes team solidarity. More than 15 years responding to disasters in leadership positions on Type 1 Incident Management Teams deployed up and down the State. Office of Emergency Management (OEM) Director with a demonstrated record of success managing large-scale projects and leading coordinated response efforts to complex disasters. Strategic thinker skilled at resolving problems, maintaining composure, and acting decisively and appropriately in crucial situations. Articulate, refined communicator with cooperative interpersonal skills and a high level of personal and professional integrity. Authored many articles and presented at numerous conferences.

KEY QUALIFICATIONS

Emergency Management: Extensive experience leading emergency operations for major fires, natural and human caused disasters and complex special projects. A recognized leader in emergency planning and operations.

Operations and Personnel Leadership: Adept with strategic planning and executive leadership. Astutely assess and resolve operational challenges with staffing and service.

Collaboration and Partnerships: Approach all issues to determine how they can have a regional benefit and make improvements to multiple communities and agencies.

Fiscal Management: Adept with budget planning, allocation, and accountability.

RECENT PROFESSIONAL EXPERIENCE

2019 – : ***Principal***
RESOLUTE ASSOCIATES LLC
Providing emergency management and strategic planning consulting. Completed numerous pragmatic planning documents and the training to support their implementation.

2016 – 2019: ***Director***
SANTA BARBARA COUNTY
OFFICE OF EMERGENCY MANAGEMENT | Santa Barbara, CA
Managed all Emergency Operations Center activations, including 12 occurrences with continuous operations spanning December 2017 to April 2018 for fire/debris-flow disaster response.

2010 – 2015: ***CAL FIRE / County Fire Chief***
CAL FIRE | San Luis Obispo County (SLO), CA
Lead a fire department with 21 fire stations, air tanker base, 12 inmate and CCC fire crews, dispatch center, training bureau, fleet management, fire prevention bureau.

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KEY CERTIFICATIONS

Certified Emergency Manager (CEM) - IAEM
Incident Commander
Operations Section Chief
Planning Section Chief
Strike Team Leader
Division Supervisor
Emergency Command Center Operations
Prescribed Fire Incident Commander

SIGNIFICANT INCIDENT RESPONSES

EOC Consultant, Creek Fire
EOC Dep. Director, Thomas Fire/Debris Flow
EOC Dep. Director, Whittier Fire
EOC Dep. Director, Winter Storm
EOC Operations Section, Sherpa Fire
EOC Agency Administrator, Butte Fire
Agency Administrator, Cuesta Fire
Agency Administrator, Springs Fire
EOC Agency Admin., Tsunami Warning
Incident Commander, Guiberson Fire
Unified Incident Commander, La Brea Fire
Incident Commander, H1N1 CDPH support
Incident Commander, Butte Lightning Comp.
Deputy Incident Commander, Harris Fire
Deputy Incident Commander, Angel Fire
Deputy Incident Commander, Tar Fire
Deputy Incident Commander, Zaca Fire
Operations Chief, Esperanza Fire
Operations Chief, Sawtooth Fire
Operations Chief, Border #50 Fire
Plans Chief, Eagle Fire
Plans Chief, Old Highway Fire
Plans Chief, Gaviota Fire
Incident Commander, Guadalupe HAZMAT
Plans Chief, Exotic New Castle Disease
EOC Fire Rep., San Simeon Earthquake
Branch Director, Grandprix Fire, Fire Siege
Plans Chief, Pechanga Fire
Plans Chief, Monterey Floods
Situation Leader, Northridge Earthquake

ADDITIONAL CAL FIRE EXPERIENCE

2009 – 2010: ***Deputy Chief, Operations*** | SLO Co., CA

2008 – 2009: ***Division Chief, Operations*** | SLO Co., CA

2006 – 2008: ***Pismo Beach Battalion Chief*** | SLO Co., CA

2001 – 2006: ***Battalion Chief/Fire Marshal*** | SLO Co., CA

1998 – 2001: ***Captain, Pre-Fire Engineer/GIS*** | SLO Co., CA

1995 – 1998: ***Captain, Cuesta Conserv. Camp*** | SLO Co., CA

1992 – 1995: ***Captain, Emergency Command*** | SLO Co., CA

1988 – 1992: ***Captain, Airport Station*** | SLO Co., CA

1984 – 1988: ***Fire Apparatus Engineer*** | Riverside Co., CA

1978 – 1984: ***Firefighter*** | SLO Co., CA

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Letter No. 08

Thomas D. Green
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Adamski Moroski Madden Cumberland & Green LLP
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Response to Comment No. O8-1

The comment states that PCPOA initially requested a 15-day extension of the public review period of the Draft EIR on April 19, 2023. A subsequent extension was requested on May 15, 2023, and again on May 16, 2023, at the Planning Commission hearing. The Planning Commission did not grant the extension, but the City has provided the following public review periods and opportunities for public input during the Shadowbox Studios EIR process:

- Publication and distribution of a Notice of Preparation (NOP) on March 28, 2022, notifying interested agencies, organizations, and persons that the City would be preparing an EIR for the Project and inviting comments on the scope and content of the EIR. The public review period for the NOP was from March 29, 2022, to April 28, 2022.
- Public scoping meeting held on April 21, 2022, at which the City accepted comments on the scope and content of the EIR.
- Publication and distribution of a Notice of Completion and a Notice of Availability of the Draft EIR on April 6, 2023, which notified interested agencies, organization, and persons that the City was accepting comments on the Draft EIR. The public review period for the Draft EIR began on April 6, 2023, and ended on May 22, 2023.
- Three Planning Commission meetings held on April 18, 2023, May 16, 2023, and June 20, 2023, to solicit comments from the public and the Planning Commission on the Draft EIR.

The public review process undertaken by the City for the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. Given the above, and based on direction provided by the City's Planning Commission, the Draft EIR review period was not extended.

In addition, the City received a request on April 19, 2023, for access to all documents referenced and incorporated by reference in the Draft EIR, and a subsequent formal Public Records request was created in the City's Resident Service Center. The City is given 10 calendar days to respond to the request. Due to the numerous and distinct records that were being requested, staff required additional time to compile, review, and provide the records responsive to the request. A response was sent to the requestor on May 1, 2023, notifying them of this requirement under the provision of Government Code 7922.535(b), which allows for an additional 14 calendar days to respond. All referenced documents, along with links to online documents that were available, were provided on May 15, 2023, closing the Public Records request.

CEQA and the CEQA Guidelines require a lead agency to make the Draft EIR and all documents incorporated by reference in the EIR available for public review. The City of Santa Clarita provided the Draft EIR, its appendices (Appendices A through O), and the documents incorporated by reference for public review during the entire review period, which extended from April 6, 2023, to May 22, 2023. Documents were made readily available on the City of Santa Clarita website

(see https://www.santa-clarita.com/city-hall/departments/community-development/planning and https://www.santa-clarita.com/city-hall/departments/community-development/planning-division/environmental-impact-reports-under-review/shadowbox-studios-project), as well as at the City Clerk's Office (in Santa Clarita City Hall) and at the Old Town Newhall Library. However, CEQA Guidelines Section 15148 also recognizes that the "preparation of EIRs is dependent upon information from many sources" and that "these documents should be cited but not included in the EIR." There is no requirement that all materials simply cited in an EIR be provided by the lead agency to potential reviewers throughout the entirety of the Draft EIR public review period.

Response to Comment No. O8-2

The comment claims that since the Planning Commission denied the request for extension of the public review of the Draft EIR, the City's CEQA process for the Project is flawed. The comment states that the public was not given adequate time or opportunity to provide meaningful comments. Please refer to Response to Comment No. O8-1 above for additional information regarding the City's public review process.

Response to Comment No. O8-3

The comment states that PCPOA does not necessarily oppose the concept of the Project because motion picture production has a history and continues to be part of Santa Clarita's character. However, the comment claims that the expansion of film production would impact the safety of Placerita Canyon residents and destroy the rural, equestrian-oriented environment of Placerita Canyon.

The comment makes general assertions that the Draft EIR is inadequate and that a meaningful public review and comment are precluded. However, this comment presents no other information or substantial evidence about the inadequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted. Responses to the comment's specific points on the Draft EIR are provided below.

Response to Comment No. O8-4

The comment questions how a project of the magnitude proposed would have no significant environmental impacts, including impacts relating to the safety and environment of the residents of the Placerita Canyon Community, other than biological, cultural, and geological. The comment states that the Project is located in an area currently designated as residential under the City's General Plan and Zoning Ordinance. It should be noted that a large portion of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The Project is permitted in the MXN zone with approval of a Conditional Use Permit (CUP).

The comment also states that the Project is located adjacent to a neighborhood that, through careful planning and management, is a semi-rural equestrian setting. As discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would implement the following components in accordance with the provisions of the PCSSD:

- The Project would be internally and externally pedestrian-oriented with bicycle amenities and accommodations. The Project would construct a Class I trail along the Project frontage at 12th Street, Arch Street, and 13th Street and would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to a future Class I trail along Railroad Avenue and future connection to the Jan Heidt Newhall

Metrolink Station and various retail, commercial, and entertainment uses in Old Town Newhall to promote a pedestrian friendly environment.

- The Project would include a defined entry gateway with landscaping and architectural elements with signage.
- The Project would utilize the MWD right-of-way behind the residences that front on Alderbrook Drive as a plant nursery, which would provide a transition between the residential uses immediately east of the Project Site and the Project.
- The majority of the Project's landscaping would use drought-tolerant trees.
- The proposed buildings would provide 360-degree architectural design with pedestrian-scaled building massing and forms.
- The Project would develop buildings with varied heights, ranging from 18 feet for the catering buildings to 55 feet for the sound stages, as permitted upon extension of the boundaries of the Jobs Creation Overlay Zone to incorporate the entire Project Site.

Furthermore, the Project would be required to undergo several City processes prior to Project approval, including architectural design review, development review, landscape plan review, and hillside review, to ensure that the Project complies with the requirements of the PCSSD and is compatible with the surrounding area, particularly the residential uses immediately east of the Project Site in Placerita Canyon.

In addition, the comment states that the Project is located in a historically high wildfire zone with very limited means of emergency ingress and egress, which will be dramatically limited by adding 2,500 vehicles at the mouth of the emergency egress point. However, as discussed on page 4.14-20 in Section 4.14, Transportation, of the Draft EIR, the off-site improvements proposed by the Project, including the widening of 12th Street, Arch Street, and 13th Street, would facilitate the evacuation of the Placerita Canyon area by reducing the evacuation congestion period at Arch Street and 12th Street; the traffic signalization of the intersection of 12th Street and Arch Street would provide for the most efficient traffic operations under an evacuation scenario. This conclusion is based on the Traffic Evacuation Assessment and corresponding evacuation modeling prepared for the Project and contained in Appendix N of the Draft EIR.

The comment cites a court case related to the provision of sufficient detail to allow for informed understanding of a project by the public and decision-makers. Overall, the comment does not identify any specific shortcomings of the Draft EIR analysis. The Draft EIR did not omit any critical information that would prohibit the decision-makers to make an informed decision on the Project. Further, the Draft EIR included sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues. The Appendices C through O of the Draft EIR contain numerous technical studies that provide detailed evaluations of the Project's potential impacts in various environmental topics. The analysis and conclusions of those technical studies are discussed in the corresponding sections of the Draft EIR, providing the reader with a summary of the technical study and directing the reader to the appropriate appendix for more technical information. The Draft EIR fully complied with all of CEQA's mandates, and the comment presents no information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-5

The comment claims that much of the analysis relating to traffic assumed that the Dockweiler improvement and extension will be completed before the Project is operational. It should be noted that the Project, which would implement off-site improvements, is not dependent on the completion of the Dockweiler Drive Extension Project. More specifically, the Project would implement the following off-site improvements, regardless of the timing of the Dockweiler Drive Extension Project:

- Widening of the rail crossing at 13th Street and Railroad Avenue;
- Widening of 13th Street, Arch Street, and 12th Street;
- Installation of a four-legged signalized intersection at 13th Street and Arch Street; and
- Installation of a four-legged signalized intersection at 12th Street and Arch Street.

If the Dockweiler Drive Extension Project is not completed prior to the completion of Project construction, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of the Draft EIR.

For further clarification, the second bullet on page 2.0-22 under Section 2.4.6, Off-Site Improvements, of the Draft EIR, was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):

- Widening of 13th Street, Arch Street, and 12th Street and installation of traffic signals at the intersections of 13th Street and Arch Street and 12th Street and Arch Street;

In addition, the following was added to the fourth bullets on page 2.0-22 under Section 2.4.6, Off-Site Improvements, of the Draft EIR (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this addition):

- Required railroad crossing improvements at 13th Street that consist of the following:
  - Widening of the rail crossing at 13th Street and Railroad Avenue;

Furthermore, the following was added at the end of Section 2.4.6, Off-Site Improvements, on page 2.0-23 of the Draft EIR (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this addition):

> If the Dockweiler Drive Extension Project is not completed prior to the completion of Project construction, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of this Draft EIR.

Response to Comment No. O8-6

Emergency evacuation conditions were analyzed in a stand-alone technical study contained in Appendix L, Transportation Assessment, of the Draft EIR (Appendix H, Traffic Evacuation

Assessment for Shadowbox Studios Evacuation Shed Santa Clarita, California, January 20, 2023, prepared by GTC) that discussed the difference between existing evacuation conditions and evacuation conditions with the Project both without and with the roundabout and without and with the Dockweiler Drive Extension Project.

As discussed on page 4.14-20 in Section 4.14, Transportation, of the Draft EIR, the off-site improvements proposed by the Project, as identified in Response to Comment No. O8-5 above, would facilitate the evacuation of the Placerita Canyon area by reducing the evacuation congestion period at Arch Street and 12th Street; as such, the creation of an additional emergency ingress/egress route for Placerita Canyon is not warranted. In addition, the traffic signal intersection design would provide for the most efficient traffic operations, as well as accommodate horse trailers more easily, under an evacuation scenario. The 1-lane roundabout design would have less capacity for evacuation operations than a traffic signal and geometric constraints that do not accommodate horse trailers as easily.

The comment claims that omission of impacts related to emergency evacuation are disturbing and render the Draft EIR inadequate and flawed. However, the comment presents no additional information or substantial evidence regarding any omissions to render the Draft EIR inadequate and flawed. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-7

The comment correctly notes that the Project is subject to the Santa Clarita Community Character and Design Guidelines and intent of the guidelines. However, the comment incorrectly claims that the Draft EIR noted "that the current general plan and zoning designation for the Project Site, consistent with the Design Guidelines, is residential." The Draft EIR consistently identified the General Plan and zoning designation of the Project Site as MXN (Mixed Use Neighborhood) and NU5 (Non-Urban 5, one dwelling unit per acre) for the area north and a small area south of Placerita Creek. The Project is permitted in the MXN zone with approval of a CUP. While the Project Site is also located within the Placerita Canyon Special Standards District (PCSSD), there is nothing in the PCSSD that would preclude the Project Site from operating as a studio.

The comment correctly cites the Draft EIR regarding views from the east but fails to identify the next part of the sentence that the residential properties are separated from the Project site by an existing chain-link fencing, a 35-foot wide access road, and a row of mature trees. The comment also incorrectly claims that the Draft EIR analysis deftly limited the Project characteristics considered in the view analysis to the catering building and the facilities building. The Draft EIR correctly evaluated the Project as proposed, including all proposed buildings, structures, components, and landscaping. To evaluate a portion of the Project without considering the entire Project (e.g., without the nursery, landscaping, or fencing), as apparently suggested by the commenter, would be inconsistent with the requirements of CEQA. It should be noted that all the residences along Alderbrook Drive, with the exception of a two-story residence near its terminus, are single-story structures with an average height of 15 feet. With a 12-foot-tall security and perimeter fence and the sound stages, mechanical building, and catering buildings being set back from the eastern boundary of the Project Site by at least 300 feet (i.e., a distance of 335 feet from the property line of the residences along Alderbrook Drive), it is not physically and geometrically possible for the rooftops of the proposed structures, including the 55-foot-tall sound stages, to be visible from any of the residences along Alderbrook Drive, with the exception of the two-story residence, even without the nursery and landscaping. The

comment claims that the City acknowledged "that the Project will negatively impact the views from the sensitive viewing locations but puts forward the nursery, landscaping and fencing as supposedly mitigating the impact," which the City did not. The comment proceeds to claim that the despite the clear evidence, for which the comment does not provide substantiation, the Draft EIR found that no mitigation measures are required to protect sensitive viewing locations. The Draft EIR correctly determined that the proposed buildings would not be in the immediate view frame of the residences and would not be visually dominating.

Response to Comment No. O8-8

The comment claims that the analysis of impacts of the view from the residences to the east was limited to two, relatively small buildings. However, the Draft EIR clearly identified all the building on the eastern portion of the Project Site relative to views from the east, specifically in the first full paragraph on page 4.1.16 in Section 4.1, Aesthetics, of the Draft EIR. In addition, at over 700 feet, it is not physically and geometrically possible for the three-story office buildings and five-story parking structure to be visible from any of the residences along Alderbrook Drive. Accordingly, the Draft EIR correctly determined that all of the proposed buildings (i.e., not limited to the catering buildings and the mechanical building) would not be in the immediate view frame of the residences and would not be visually dominating. The comment presents no substantial evidence or information to support their claims. Accordingly, no further analysis is warranted.

Response to Comment No. O8-9

The comment states that the status quo is that the Project Site to remain designated for residential use under the General Plan and zoning ordinance and cited Table 5-1 in Section 5.0, Alternatives, of the Draft EIR. The comment claims that properly designed and developed housing on the Project Site would meet the current designation and could avoid the inherent conflict with the adjacent rural and equestrian-oriented neighborhood. In addition, the comment incorrectly claims that the Project would change the Project Site's land use designation from residential to industrial and that, by its very nature, creates a significant environmental impact particularly on the Placerita Canyon Community.

As noted in Response to Comment Nos. O8-4 and O8-7, a large portion of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The General Plan Amendment and Zone Change requested for the Project would not involve a change to industrial use as the studio use is permitted in the MXN zone with approval of a CUP.

In addition, contrary to the comment's claim a residential project would not avoid conflict with the adjacent rural and equestrian-oriented neighborhood. As presented in Section 5.0, Alternatives, of the Draft EIR, Alternative 2, which represents residential development consistent with the existing zoning of the Project Site, would result in lesser impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources. However, under Alternative 2, views along the eastern boundary of the Project Site would be more intense as the residences along Alderbrook Drive would have direct views of the residential buildings with heights up to 50 feet. Alternative 2 would also generate a greater number of daily trips and a higher VMT per capita than the Project. Correspondingly, a residential project would result in greater impacts related to air quality, energy, GHG emissions, hazards and hazardous materials (regarding wildfire), noise, population and housing, public services, transportation, utilities and service systems, and wildfire.

Response to Comment No. O8-10

The comment claims that there was no real analysis of the Project's consistency with the PCSSD and that the discussion was limited to a single block in Table 4.10-2. The comment also implies that the PCSSD standards would need to be amended to accommodate the Project. It should be noted that page 4.10-40 includes a discussion of the PCSSD. In addition, the Project is not requesting any amendments to the PCSSD standards. Please refer to Response to Comment No. O8-4 for a discussion of the Project features to be implemented by the Project in accordance with the provisions of the PCSSD. Furthermore, the Project would be required to undergo several City processes prior to Project approval, including architectural design review, development review, landscape plan review, and hillside review, to ensure that the Project complies with the requirements of the Placerita Canyon Special Standards District and is compatible with the surrounding area, particularly the residential uses immediately east of the Project Site in Placerita Canyon. Accordingly, the Draft EIR adequately addressed the Project's consistency with relevant plans, including the PCSSD standards.

Response to Comment No. O8-11

The comment claims that the compatibility analysis relating to the Placerita Canyon Community was omitted in the Draft EIR and that previously undisclosed new impacts are sufficient to require additional discussion and mitigation measures to trigger the requirement for recirculation of the EIR. It is not clear what new impacts to which the comment is referring that would constitute new information or substantial evidence that meets any of the criteria for recirculation of the Draft EIR. As discussed in Response to Comment No. O8-10, the Draft EIR adequately analyzed the Project's consistency with relevant plans, including the PCSSD standards.

Response to Comment No. O8-12

The comment claims that "the Project's location in the North Newhall Area already imposes the requirement of public participation and outreach to the Placerita Canyon Property Owners Association" is misleading as the City has not initiated working with the PCPOA to develop standards for new development. As stated in Response to Comment No. O8-10, the Project is not requesting any amendments to the PCSSD standards. As such, the requirement that the City and PCPOA work together to amend the PCSSD in the Unified Development Code is not applicable.

Please refer to Response to Comment No. O8-1 regarding the request to extend the time for public comment on the Draft EIR.

Response to Comment No. O8-13

The comment claims that the Draft EIR purported to consider whether the Project will be consistent with the Santa Clarita Municipal Code (SCMC) by referring to the limited "analysis" provided on page 4.10-39, which the comment alleges ignored anything to do with the character of the residential community. However, the comment failed to acknowledge the analysis of Project's consistency with the provisions of the PCSSD (SCMC Section 17.39.020), Oak Tree Permit (SCMC Section 17.23.170), Oak Tree Preservation (SCMC Section 17.51.040), and Ridgeline Alteration Permit (SCMC Section 17.26.130), as well as the Design Guidelines.

The comment correctly asserts that there is not an agreement with MWD for use of their property. No such agreement would be executed in advance of an approval for the Project and certification of the EIR; however, MWD has provided a letter to City Staff, upon their review of the Project plans, indicating the proposed grading and parking lot are generally acceptable and have

acknowledged the plant nursery. The Draft EIR appropriately acknowledged the Project's perimeter wall and proposed plant nursery because they are components of the applicant's proposal. The Draft EIR also acknowledged on page 2.0-20 in Section 2.0, Project Description, of the Draft EIR, that the development of the plant nursery is subject to an agreement with MWD.

Response to Comment No. O8-14

The comment states that the Draft EIR consistently equated project characteristics with mitigation and access that those characteristics will be in place, which makes for a flawed analysis. These project characteristics or project design features (PDFs) are features of the Project that would be included in the construction and operation of the Project that would be implemented above and beyond compliance with specific regulations and requirements. The description and inclusion of PDFs in the Draft EIR is not flawed, as alleged by the commenter, but rather aids in fulfilling the required contents of an EIR. CEQA Guidelines Section 15126.4, in particular, expresses that an EIR should discuss "the measures which are proposed by project proponents to be included in the project." Therefore, the inclusion of the PDFs is not considered mitigation because they are part of the construction design of the Project or proposed operation of the Project. Moreover, the conclusion that aesthetic impacts are less than significant is not dependent on the landscape nursery proposed in the MWD right-of-way. As discussed in Response to Comment No. O8-7, numerous factors contribute to this conclusion, including the existing chain-link fencing, a 35-foot wide access road, and a row of mature trees, as well as the setback to the proposed sound stages and parking structure and the line-of-sight from vantage points to the east. No changes to the Draft EIR are made based on this comment.

Response to Comment No. O8-15

The comment again makes an assertion that the EIR recognized the Project Site's current land use designation as residential and that the Project will remove nearly 10 percent of potential housing units available with the City. The City's 6th cycle Housing Element includes a detailed site inventory to ensure the City has adequate capacity to meet the regional housing needs. While the existing zoning on the Project Site could allow for the development of housing, the Project Site is not included in the site inventory of the City's Housing Element as a suitable housing site.

As stated in the City's General Plan Economic Development Element, the City seeks to enhance the quality of life for its residents by providing opportunities to work closer to home. The Project would create jobs in the entertainment industry, which is one of the City's four targeted industry sectors. Thus, the Project would have a cumulative positive contribution to employment in the Santa Clarita Valley, which is considered one of the housing-rich areas of Los Angeles County, as it would create more high-quality jobs for the City's residents.

The comment's states that, "employees living close to work is the key to the [Draft] EIR's very analysis of Transportation impacts because, in the [Draft] EIR's theory, those employees will be commuting by bicycle or municipal transit," which is incorrect. Rather, SCAG's RTP/SCS Regional Travel Demand Model was used to predict the geographic distribution of Project employees, which considers the regional distribution of both residential and employment land uses and estimates the most likely distribution of employees based on the regional pattern of employment opportunities.

Response to Comment No. O8-16

The comment questions the Draft EIR's statement that, "Rather than increase population growth in the City, it is anticipated that the employment growth would be filled by existing residents of the

City." However, the comment takes this statement out of context as it is not the basis for concluding that any environmental impacts related to population and housing are less than significant. Rather, the Draft EIR concludes that impacts related to population and housing would be less that significant because the Project would neither induce substantial unplanned population growth in an area, either directly or indirectly, nor displace substantial numbers of people or housing. Regarding potential population growth, pages 4.12-6 and 4.12-7 in Section 4.12, Population and Housing, of the Draft EIR, explain that the employment growth anticipated to result from the Project is within the level of employment growth planned for by the City's General Plan. The Economic Development Element of the General Plan establishes a goal of a 2 to 1 jobs/housing balance. The Project would aid the City in achieving this goal by increasing the City's jobs/housing ratio to 1.23 to 1 with the addition of the Project's anticipated 2,333 direct employment opportunities and potentially up to 1.28 to 1 with the addition of the Project's additional anticipated 3,500 indirect employment opportunities. Finally, the level of total City employment anticipated with the Project (98,361 to 101,861 jobs) is well within the "Employment Projections" described on page L-25 of the Land Use Element of the City's General Plan, which states that, "The estimated number of new jobs under General Plan build-out ranges from 98,322 to 128,850. Added to existing jobs within the Valley, the total number of jobs in the planning area is estimated to range from 217,910 to 286,254 at General Plan build-out." The Land Use Element states that approximately 60 percent of the jobs within the Santa Clarita Valley are within the City, which would equate to a total of 130,746 to 171,752 total jobs in the City of Santa Clarita at General Plan buildout. Please see also Response to Comment No. O8-15 above.

Response to Comment No. O8-17

The comment asserts that the conclusion of the Draft EIR that there are no significant transportation impacts is ridiculous and questions how adding a large project located along an already congested area will have no significant environmental impact without imposition of mitigation measures. The comment ignores the fact that the State of California, under Senate Bill (SB) 743, established new criteria for determining the significance of transportation impacts and defined alternative metrics for traffic level of service (LOS). SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts for land use projects in California. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." Specifically, CEQA Guidelines Section 15064.3 establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. As such, the Transportation Assessment (Appendix L of the Draft EIR) followed the new State of California CEQA Guidelines, as well as the methodology established in the City's *Transportation Analysis Updates in Santa Clarita* (TAU).

Response to Comment No. O8-18

The comment refers to and incorporates comments from Mr. Alex Tabrizi with MAT Engineering. Please refer to Response to Comment Nos. O8-32 to O8-67, which address Mr. Tabrizi's comments regarding his peer review of the transportation/traffic analysis and parking analysis study for the Project.

Response to Comment No. O8-19

The comment claims that there are some problems with the Transportation analysis in the Draft EIR, the first as to whether the Project will be conditioned on the completion of the necessary road improvements, particularly the Dockweiler Drive Extension Project. Please refer to Response to Comment No. O8-5 above.

Response to Comment No. O8-20

The comment notes that the Draft EIR finding of "no impacts" is inconsistent with the traffic study regarding impacts to levels of service. Please refer to Response to Comment No. O8-17 above. However, in addition to the VMT analysis, the City of Santa Clarita also requires a non-CEQA analysis of intersection performance and defines an "affected intersection" as follows:

> Based on thresholds determined using criteria established by the City, an intersection would be considered affected by Project-generated traffic if the Project would do any of the following:
>
> - Worsen an intersection maintained by the City from LOS D or better to LOS E or F or
> - Cause the following increase in delay at an intersection maintained by the City that would operate (with the Project) at LOS D or worse:
>
> LOS D with the Project: more than four-second increase in delay
>
> LOS E or F with the Project: more than two-second increase in delay

As described above, traffic impacts to the LOS at the intersection of Railroad Avenue and 13th Street would not be a significant impact under CEQA. In addition, the intersection of Railroad Avenue and 13th Street would not be affected by Project traffic because it would still operate at an acceptable LOS. LOS D is the target LOS citywide. A change from LOS C to LOS D at any intersection is not considered a significant impact by the City.

Response to Comment No. O8-21

The comment notes a concern that the completion of the Dockweiler Drive Extension improvements is not a condition of commencing operations for the Project. Please refer to Response to Comment No. O8-5 above.

Response to Comment No. O8-22

The comment questions the conclusion of the Draft EIR that the Project will have no significant impact, without any mitigation measures, on emergency evacuation. The Transportation Assessment (Appendix L of the Draft EIR) contains a specific evacuation memo (Appendix H) that discusses the difference between existing evacuation conditions and evacuation conditions with the Project both without and with the roundabout and without and with the Dockweiler Drive Extension Project. In all cases, the evacuation times would improve with the Project due to the off-site improvements that would be implemented by the Project. As discussed in Response to Comment No. O8-6, these off-site improvements would facilitate the evacuation of the Placerita Canyon area by reducing the evacuation congestion period at Arch Street and 12th Street. The traffic signal intersection design, when compared to the roundabout design or existing conditions, would provide for the most efficient traffic operations, as well as accommodate horse trailers more easily, under an evacuation scenario.

Response to Comment No. O8-23

The comment questions the degree of analysis regarding the roundabout and as related to emergency evacuation. The Transportation Assessment evaluated in detail both the roundabout and the signalized intersection alternatives and concluded that either alternative would work satisfactorily under normal conditions. However, that would not be the case under evacuation conditions as described in the comment. The 1-lane roundabout design would have less capacity for evacuation operations than a traffic signal. In addition, the roundabout design would also have geometric constraints that do not accommodate horse trailers as easily. A thorough analysis of the comparison between the traffic signal and roundabout was included in the study. A signalized intersection design would provide for the most efficient traffic operations under an evacuation scenario when compared with the roundabout or existing conditions.

Response to Comment No. O8-24

The comment states that the most critical aspect of environmental analysis for the Project is its impact on the safety of the surrounding community. The comment also notes that the Project is located at the only emergency exit point for the Placerita Canyon Community and that the current evacuation time for the community is approximately 2.5 hours, which according to the comment, is low because it does not factor in the number of horses that will need to be evacuated.

The evacuation analysis measured the time it took for a standard mix of vehicles (auto, trucks, trailers) to move from the Canyon to Railroad Avenue. To the extent that the comment is correct in that there would be an inordinate number of horse trailers leaving the Canyon, the trailers would have the same effect on all three evacuation scenarios analyzed (Existing Condition, Future Condition with a Roundabout, and Future Condition with a Traffic Signal) and, thus, would not change the conclusions that with the Project evacuation times would improve and that the Future Condition with a Traffic Signal would have a shorter evacuation time that the Future Condition with a Roundabout. As discussed in previous responses above, the evacuation scenario with the Project and a traffic signal design would provide the horse trailers with additional roadway capacity and easier maneuverability through the corridor.

In terms of the added footnote, the evacuation analysis did not assume that the second exit point would be available for any Placerita Canyon neighbors to use or that the Dockweiler Drive Extension Project would be used during an evacuation scenario.

Response to Comment No. O8-25

The comment introduces a third-party reviewer, Rob Lewin with Resolute Associates, and briefly summarizes his qualifications. The comment states that the Project's Draft EIR focused only on the safety and evacuation of the Project, not the adjacent communities. The commenter correctly states that the Fire Protection Plan (FPP) prepared for the Project, itself, did not include an evacuation analysis. However, an extensive evacuation modeling analysis (included as Appendix H of the Transportation Assessment in Appendix L of the Draft EIR) was conducted that evaluated a worst-case wildfire or other emergency that would require all evacuees to leave the Project area through the intersection of Railroad Avenue and 13th Street to the west. This evacuation analysis did not focus on the evacuation of the Project but exclusively of the surrounding Placerita Canyon neighborhood. The analysis accounted for the existing population in the Placerita Canyon neighborhood and evaluated evacuation times both without and with the Project to determine the Project's impact during an evacuation event. Page 4 of Appendix G of the Transportation

Assessment contains an explanation that one of the key considerations of the evacuation analysis in the Placerita Canyon area involves the need to be able to evacuate the homes, schools, and businesses in the Canyon in the event of a fire or natural disaster. Accordingly, the evacuation focused on the Canyon neighbors, not on the Project employees. The travel times cited in the analysis are from 12th Street and Hacienda Lane to points north and south on Railroad Avenue.

Page 4 of Appendix G of the Transportation Assessment also states that, as required by Evacuation Analysis procedures, the analysis simulates worst-case conditions assuming that all exiting traffic would use the Railroad Avenue and 13th Street intersection to access the City's road network. Under this analysis, and contrary to the comment, it was assumed that no evacuation would occur via Placerita Canyon Road or the future Dockweiler Drive connection. However, as stated in Response to Comment No. O8-5 above, the Project would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, and independent of the Dockweiler Drive Extension Project. As such, even though Table 24B assumed that Intersection #17 would include the Dockweiler Drive Extension Project, Dockweiler Drive would not be used, but improvements to the intersection that would be implemented by the Project were still taken into account to determine potential evacuation impacts on the Placerita Canyon Community. These improvements, which include a signalized intersection design, were determined to provide for the most efficient traffic operations under an evacuation scenario when compared with the roundabout or existing conditions. In addition, the signalized intersection design was determined to provide the horse trailers with additional roadway capacity and easier maneuverability through the corridor.

As relates to the comment regarding the wildfire analysis, the FPP and the Traffic Evacuation Assessment are two separate analyses. The Fire Protection Plan specifically addressed the potential fire risk associated with the Project's land uses and identified requirements for water supply, fuel modification and defensible space, access, building ignition and fire resistance, and fire protection systems, while the Traffic Evacuation Assessment analyzed the anticipated performance along the Dockweiler Corridor, which comprises 12th Street, Arch Street, 13th Street, and Railroad Avenue, as discussed above.

Response to Comment No. O8-26

The comment provides an opinion regarding the adequacy of the fire safety analysis based on an assumption that the Dockweiler Drive Extension improvements would not be constructed by Project completion. Please refer to Response to Comment No. 08-25 above regarding the Project's evacuation network improvements and for an explanation differentiating the Project's Fire Protection Plan from the Traffic Evacuation Assessment. Please also refer to Response to Comment No. O8-5 for an explanation of the Project's independent utility from the Dockweiler Drive Extension Project.

Response to Comment No. O8-27

The comment accurately notes the fire behavior modeling output from Table 3 of the Project's FPP, which is included as Appendix N of the Draft EIR. The comment suggests that the Draft EIR is fatally flawed due to lack of mitigation measures to address Project impacts on evacuation times. As discussed in Response to Comment No. O8-25, the evacuation analysis conducted by Gibson concluded that Project would improve evacuation times for the Placerita Canyon community. The evacuation analysis provides the decision-makers with comparisons of evacuation times under Existing Conditions, Future Conditions with the Roundabout, and Future

Conditions with Traffic Signals. The scenario measuring Future Conditions with Traffic Signals reduces the evacuation time for the Canyon neighborhoods by almost 50 percent, offering substantial benefits to the Canyon residents in an evacuation situation.

Response to Comment No. O8-28

The comment indicates that there is an impact on wildfire safety that should have been mitigated through creation of a new emergency egress point through the Circle J development. As discussed in the public meeting before the Planning Commission on May 16, 2023, an additional access point to the Project Site along Railroad Avenue near 15th Street was considered. An evaluation of this location showed that the railroad tracks were too close to Railroad Avenue to permit the construction of a grade-separated rail crossing. The Southern California Regional Rail Authority (SCRRA) strongly discourages new grade crossings, and new grade crossings are not allowed unless the member agency (i.e., City of Santa Clarita) requests and receives approval from the SCRRA Board, which will require the City to close a nearby crossing. Pursuant to the California Public Utilities Commission General Order 88-B, a new application must be made for new crossings, and the new crossing would be required to eliminate an existing at-grade crossing. In addition, the Federal Highway Administration Railroad-Highway Grade Crossing Handbook states that new grade crossings, particularly on mainline tracks, should not be permitted unless no other viable alternatives exist and that, even in those circumstances, consideration should be given to closing one or more existing crossings.

The Transportation Assessment in the Draft EIR evaluated the access points to the Project and found that the proposed Project driveways and adjacent intersections would operate at acceptable LOS, meeting City of Santa Clarita thresholds.

The Project does not own the land connecting the north auxiliary parking lot and the Circle J Ranch and, therefore, is not in a position to offer an exit to the north.

Response to Comment No. O8-29

The comment claims that the alternatives analysis of the Draft EIR is defective and inadequate due to the deficiencies in the remainder of the EIR analysis in that almost all impacts were determined to be less than significant. However, as demonstrated in Response to Comment Nos. O8-3 through O8-28 and O8-33 through O8-82, the Draft EIR fully complied with all of CEQA's mandates, and the comment presents no new information or substantial evidence to conclude that the Draft EIR is defective and inadequate. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-30

The comment claims that the reasons to reject the Saugus Speedway as an alternative site are not valid and questions why the loss of housing stock was given as a reason to reject the alternative site, but the loss of housing from development of the Project at the Project Site was not considered. The Saugus Speedway site is listed as a suitable site in the City's Housing Element sites inventory. Consequently, development of the Project on this site could have a significant impact on the City's population and housing projections. On the contrary, the Project Site, which is located within a High Quality Transit Area and a Transit Priority Area, is not listed as a suitable site in the City's Housing Element sites inventory buy is suitable to accommodate a large employment generator in a housing-rich area, while contributing to the City's economic development and the growth of the entertainment industry as one of the City's four targeted

industry sectors. Regardless, the Draft EIR evaluated an adequate and reasonable range of alternatives, and the comment provides no reason why the Saugus Speedway site should be considered as a means to reduce any potentially significant environmental impacts of the Project.

Response to Comment No. O8-31

The comment claims that the Draft EIR failed to meet CEQA standards on several levels, as well as the lack of mitigation measures to address the Project's significant impacts. However, as demonstrated in Response to Comment Nos. O8-3 through O8-28 and O8-33 through O8-82, the Draft EIR fully complied with all of CEQA's mandates, while the comment provides no specific evidence to support these claims. The comment states it reserves the right to continue to provide comments on the Draft EIR and Final EIR until certification and the filing of the Notice of Determination. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-32

The comment states that MAT Engineering conducted a peer review of the transportation/traffic analysis and provides the perspectives in Comment Nos. O8-33 through O8-66. The comment also includes a description of the Project, including parking and vehicular access, and a reference to the previous project proposed for the Project Site, and all the documents that were peer-reviewed. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O8-33

The comment claims that the transportation analysis failed to include an exhibit or data showing the magnitude of trips added generated by the 36 related projects to each movement of the study intersections. Future traffic volumes are based on the City's transportation model and include vehicular demand from all known and potential projects. The City's model was checked to verify that sufficient growth was assumed in each Traffic Analysis Zone to accommodate the known related projects shown in Figure 7 and Table 5 of the Transportation Assessment (Appendix L of the Draft EIR).

Response to Comment No. O8-34

The comment correctly notes that trip generation for the Project was indeed based on studios traffic studies conducted for studio projects in the Southern California region. The studio locations covered a wide range of locations and area density, and the trip rates were found to be similar.

The comment claims that since the only public transportation available in Santa Clarita is the local bus system and Metrolink, the trip generation of similar uses from Los Angeles reflects higher use of public transportation and other modes of transport, resulting in a lower trip generation estimate for a site in Santa Clarita. The rates used for the Project were approved by the City of Santa Clarita based on similar rates use in other studio campus studies in the City. In addition, based on the Project's proximity to the Jan Heidt Newhall Metrolink Station, it is entirely appropriate to assume that a percentage of employees would use transit. The Project would be conditioned to either (1) pay an in-lieu fee to contribute towards improvements or (2) construct a connection to provide a link for pedestrians and bicyclists between the Project Site and the Jan Heidt Newhall Metrolink Station.

The comment questions how the breakdown of trip rates for sound stages, support uses, and production office uses was obtained. The breakdown of trip rates into studio and production support areas was based on detailed studies conducted for Universal Studios Hollywood and verified with empirical counts at Television City studios in Los Angeles.

Response to Comment No. O8-35

The comment claims that the Draft EIR did not indicate how the trip generation from the other studios' traffic studies was considered and questions how the trip generation fluctuate throughout the day and whether the Project's trip generation was for mid-day, later in the evening, or weekend conditions. The City of Santa Clarita requires that the analysis of roadway conditions be performed during the peak hour of roadway traffic, which represents the worst-case scenario and is typically the commuter peak hours in the morning and afternoon peaks. Therefore, the combination of Project traffic with background traffic during the mid-day, evening, or weekend time periods would not exceed the traffic volumes during the peak hours studied in the Transportation Assessment. Accordingly, the conditions mentioned in the comment do not require further consideration as the impacts from the worst-case scenario have already been identified.

Response to Comment No. O8-36

The comment correctly notes that one of the incentives applied to applicable projects in the JCOZ is a 20-percent reduction in parking but questions whether the reduction applies to the Project considering its unique nature. The Parking Analysis Form submitted to the City includes a shared parking demand analysis that considers the daily and hourly parking patterns of the various land use components of the Project to show whether the parking supply, even with the JCOZ reduction included, would provide sufficient parking to meet the Project's parking peak demand.

The required parking ratios for the Project were determined by applying parking ratios from the City's Unified Development Code (UDC) to the individual buildings based on the use of each building and determined that the required parking would be 2,969 spaces. After the application of the allowable 20-percent reduction of parking under the JCOZ, the required parking would be 2,375 spaces.

Parking demand rates collected at other Southern California studio campus projects were applied in order to compare parking demand patterns to the proposed supply. In addition, the Urban Land Institute (ULI) Shared Parking model was applied to the Project. The results of both these analyses indicate that the provided parking supply of 2,684 spaces would exceed the Project's parking demand during peak filming season—2,162 spaces using the parking demand rates from the studio campus projects or 2,301 spaces using the ULI model. The Parking Analysis is included as Appendix B of the Transportation Assessment for the Shadowbox Studios Project.

Response to Comment No. O8-37

The comment asserts that considering the significance of the Project and the magnitude and nature of the Project trips, addition of a long-range conditions analysis is appropriate to evaluate the traffic conditions at full area buildout. The City does not require long-term intersection analyses to be performed on a project-level basis. The City's transportation model was used to analyze the opening year effects of the Project on the street system both without and with the Dockweiler Drive Extension Project, which comprises modifications to 12th Street, Arch Street, 13th Street, and Railroad Avenue. In addition, the traffic projections in the City's transportation model were factored in to include the

traffic attracted by the Dockweiler Drive Extension Project in order to fully reflect the Opening Year conditions evaluated in the Project Transportation Assessment.

Response to Comment No. O8-38

The comment claims that Caltrans should have been consulted or involved in the development of the scope and review of the traffic study. Caltrans submitted comments in response to the Notice of Preparation. Caltrans' comments were related to the use of VMT as the primary metric in identifying transportation impacts of all projects under CEQA, the use of the Caltrans Interim Local Development and Intergovernmental Review Safety Review Practitioners Guidance, consideration of Transportation Demand Management (TDM) strategies, bicycle or pedestrian connectivity improvements, the promotion of alternative transportation, and Caltrans permit requirements regarding transportation of equipment or materials to and from the Project Site. All of these comments were addressed in Section 4.14, Transportation, of the Draft EIR. In addition, the Project would be required to comply with any Caltrans permit requirements prior to construction.

More specifically, Caltrans methodology was followed to evaluate the effects of Project traffic on the freeways and freeway ramps serving the Project Site. As presented on pages 4.14-20 and 4.14-21 in Section 4.14, Transportation, of the Draft EIR, a freeway safety analysis was conducted based on the Caltrans Safety Guidance to identify potential safety impacts at freeway off-ramps as a result of increased traffic from the Project. The freeway safety analysis considered future Project conditions without and with the implementation of the Dockweiler Drive Extension Project. Under both conditions, the addition of Project traffic would result in less-than-significant impacts to Caltrans facilities and freeway safety.

Caltrans was also notified of the availability of the Draft EIR; however, no comments were received.

Response to Comment No. O8-39

The VMT threshold is the appropriate threshold for this analysis and was vetted by the City and the City's EIR consultant. Footnote [c] on Table 10 on page 50 of the Transportation Assessment (Appendix L of the Draft EIR) clearly explains that the 14.0 work VMT per employee is the appropriate CEQA threshold based on an interpolation between the 2020 threshold of 15.7 work VMT per employee and the 2040 threshold of 11.5 work VMT per employee (not 11.7 as described in the comment). The 15.7 and 11.5 thresholds include the 15-percent reduction from citywide average and do not need to be further reduced to account for the 15 percent.

Response to Comment No. O8-40

The comment correctly notes that the City's baseline home-based work VMT as 18.4 for year 2020 and 13.5 for year 2040. These represent the citywide averages for 2020 and 2040 prior to the 15-percent reduction to establish the VMT threshold identified in Response to Comment No. O8-39 above and used in the Project's VMT analysis.

Response to Comment No. O8-41

The comment correctly notes that the Level of Service time frames used in the Transportation Assessment as typical weekday from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. but recommends that the analysis time frames be expanded to include school and church traffic. Please refer to Response to Comment No.O8-35 above.

The City's requirement for an employment project similar to the Project is to evaluate the Project's potential impacts during the weekday peak commuter hours. The Project peak trip generation coincides with the morning peak hours for schools and is low during the mid-afternoon peak hours for schools. Therefore, the peak impact on school traffic is already included in the Transportation Assessment as part of the morning peak hour analysis. In addition, the Project generates very little traffic on a Sunday morning and, therefore, is not likely to interfere with traffic to/from nearby religious institutions.

Response to Comment No. O8-42

The comment claims that the main access on 13th Street did not account for adequate storage capacity to keep vehicles from queuing outside the Project Site and onto public right-of-way. The inbound lanes to the Project at Gates 1 and 2 provide 2,100 linear feet of queuing space, which is more than double the typical storage length for projects of this type and size. The entry gates for Gates 1 and 2 off the intersection of 13th and Arch Streets have been set back well away from the public street intersection, and, as such, no queuing that would extend to the intersection is anticipated.

Response to Comment No. O8-43

The comment claims that the Draft EIR did not assume existing traffic signal timing data based on information provided by the City and Caltrans, and that because of that, the vehicular queues and level of service probably did not match existing field conditions. In the City of Santa Clarita, signal timing and phasing are obtained directly from the City's Department of Public Works' Traffic and Transportation Planning Division. Any adjustments to those settings to accommodate shifts in future traffic demand were discussed and approved by the City's Traffic Engineer prior the preparation of the Transportation Assessment.

Response to Comment No. O8-44

The comment claims that the Project trip distribution be revised to reflect a larger portion of Project trips at the freeways since the comment asserts that the majority of the trips should be coming from outside the City and from the greater Los Angeles and nearby areas. The Project trip distribution was reviewed and approved by City staff during the scoping process and is based on distribution for the Project area in the City's areawide transportation model. One of the purposes of the Project is to provide jobs closer to the workforce of a housing-rich area of the region, so it is not necessarily accurate to assume that the majority of Project employees would come from Los Angeles. There is also the adjacent Jan Heidt Newhall Metrolink Station, which can and will handle a portion of the employee demand from Los Angeles.

Response to Comment No. O8-45

The comment questions how the ramp queuing analysis prepared for the Project compared to the existing vehicular queues at the freeway ramps and if there are currently minimal queues present at the ramps during peak hours.

Ramp queuing analysis was done to determine if future conditions with the Project would cause traffic queues to exceed the capacity of the ramp. The analysis, based on the Highway Capacity Manual, showed that situation would not occur. The only location where the Project adds enough peak hour traffic to an off-ramp serving the Project Site to meet the threshold criteria is the SR-14 southbound off-ramp at Newhall Avenue, where the Project would add 38 morning and 30 afternoon peak hour trips to the ramp (see Table 11 on page 59 of the Transportation Assessment (Appendix L of the Draft

EIR)). Table 12 (page 60 of that same document) identified the additional queue lengths caused by the additional Project trips and showed that the Project would create an additional two feet of morning queue and three feet of afternoon queue. Accordingly, the analysis summarized in Table 12 showed that neither the Year 2028 queue without the Project nor the 2028 queue with the additional Project traffic would exceed the storage capacity of the ramp.

Response to Comment No. O8-46

The comment claims that the Draft EIR failed to provide the source and methodology for determining the Project trip distribution assumptions or any alternative or interim traffic or evacuation plans in the event the Dockweiler Drive Extension Project is not completed and suggests that the Project should not be built until the Dockweiler extension is completed.

Regarding trip distribution, please see Response to Comment No. O8-44 above. Project trip distributions were determined for both without and with the implementation of the Dockweiler Drive Extension Project scenarios and applied to the study area roadways.

In regard to the Dockweiler Drive Extension Project and lack of alternative or interim traffic plans, please see Response O8-5 above.

Table 18 on page 127 of the Transportation Assessment (Appendix L of the Draft EIR) shows the results of the intersection capacity calculations assuming that the Project is completed before the Dockweiler Drive Extension Project is built. The table shows that the intersection of 13th Street and Arch Street would have to be improved by the Project if it were to open before the Dockweiler Extension was completed. This improvement would extend westerly to Railroad Avenue.

The roadway improvements that would have to be implemented by the Project prior to obtaining a Certificate of Occupancy are discussed in Response to Comment No. O8-5. The Staff Report presented at the June 20 Planning Commission Meeting also presented these roadway improvements as Conditions of Approval for Commission consideration.

Response to Comment No. O8-47

The comment recommends the Transportation Assessment include an evaluation of the level of service operation at the Gate 3 access, as well as the 16 intersections listed in the comment.

As identified on page 2.0-21 in Section 2.0, Project Description, of the Draft EIR, Gate 3 would provide Project-related egress-only and be restricted to a right-turn movement onto 12th Street. As such, the only possible delays and backups would occur on private property, which would not affect the local transportation network. LOS for traffic on 12th Street would always be LOS A as there are no stops or opposing movements.

The study intersections included in the Transportation Assessment were selected by the City's Traffic Engineering staff as part of the Transportation Study scoping process. Page 37 of the City's TAU identifies the criterion for the selection of study intersections to be the "intersections where the proposed project would add 50 or more net new trips during the AM and PM peak hours should be included in the study."

Staff can add study intersections beyond these volume targets based on their knowledge of the Project's trip generation and trip distribution patterns, allowing them to select the locations most likely to be affected by the Project. Based on the above information, the City's Traffic Engineering

staff included any and all intersections that are likely to be affected by Project traffic. Intersections that were not considered either have sufficient remaining capacity or do not meet the 50-trip threshold and, thus, are not likely to be affected by the Project per the TAU thresholds.

The list provided in the comment suggests the study of seven additional freeway ramps, but City staff had already selected the five ramps most likely to serve the majority of the Project traffic. The additional ramps suggested are north of the I-5/Pico Canyon Road/Lyons Avenue ramp, where the analysis (shown in Tables 16 through 20) indicated that the Project would have no impact. Accordingly, Project traffic would be less likely to use these northerly interchanges than the ramps already studied, and any Project trips added are not anticipated to be more than the 19 Project trips added to the morning peak hour or the 15 Project trips added to the afternoon peak hour at the I-5 northbound off-ramp to Lyons Avenue.

Response to Comment No. O8-48

The comment claims that the existing traffic counts were obtained from older studies from 2017 and 2019 and that more recent traffic count data need to be utilized. The comment suggests that, alternatively, a sampling of newer counts be performed and compared to the data used in the study to ensure their validity.

New intersection traffic counts were not performed because the Transportation Assessment was conducted in the middle of the COVID pandemic, and data collection was not possible as traffic volumes would not have reflected pre-pandemic conditions.

Traffic counts have been conducted for other development projects in the City in Year 2023, and the results of these traffic counts indicate that current traffic volumes in Santa Clarita have yet to rise to pre-pandemic levels. Using pre-pandemic traffic counts and still applying a yearly growth factor through the pandemic years results in much higher traffic volumes for Existing Conditions than would occur if new counts were taken in 2022 or 2023.

Response to Comment No. O8-49

The comment questions how the 35 related projects were accounted for in the traffic projects and if the related projects' trips were manually assigned to the roadway network.

Please see Response to Comment No. O8-33 above. The related projects are included in the City's traffic model either as a specific project being proposed or the zoning code allowances for the related project site.

Response to Comment No. O8-50

The comment questions why some of the delays identified in Tables 16 and 17 of the Transportation Assessment appear to improve with the added trips from the Project without explanation or basis. The delay shown is average vehicle delay for every vehicle in every movement at the entire intersection. In situations where Project traffic is added to movements with a low delay time, it causes overall intersection average delay to decrease. For example, an intersection with an average delay of 15.0 seconds may have a through movement with an average delay of only 3.0 seconds. If vehicles were only added to the through movement, the overall intersection delay would decrease because vehicles are added vehicles with an average delay of 3.0 seconds, less than the intersection average of 15.0 seconds. Therefore, the average intersection delay would decrease below the pre-Project condition of 15.0 seconds.

Response to Comment No. O8-51

The comment suggests adding another column to Table 17 of the Transportation Assessment to identify the level of service impacts similar to Table 16. Accordingly, Table 17 on page 125 of the Transportation Assessment was revised as follows (see Section 3.0, Errata and Clarifications to the Draft EIR, of this Final EIR, for this revision):.

Table 17
EXISTING CONDITIONS WITH RAILROAD CROSSING UPGRADE (YEAR 2021)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	∆ Delay	Impact
1.	Bouquet Canyon Road &	A.M.	48.2	D	48.8	D	0.6	No
	Newhall Ranch Road	P.M.	50.7	D	50.6	D	-0.1	No
2.	Bouquet Canyon Road &	A.M.	30.0	C	30.3	C	0.3	No
	Valencia Boulevard/Soledad Canyon Road	P.M.	46.4	D	46.1	D	-0.3	No
3.	Railroad Avenue/Bouquet Canyon Road &	A.M.	28.7	C	32.3	C	3.6	No
	Magic Mountain Parkway	P.M.	25.9	C	25.4	C	-0.5	No
4.	Railroad Avenue &	A.M.	13.0	B	12.4	B	-0.6	No
	Oak Ridge Drive	P.M.	12.6	B	22.2	C	9.6	No
5.	Railroad Avenue &	A.M.	21.9	C	23.2	C	1.3	No
	13th Street	P.M.	23.9	C	25.0	C	1.1	No
6.	Railroad Avenue &	A.M.	21.2	C	31.9	C	10.7	No
	Lyons Avenue	P.M.	28.5	C	28.8	C	0.3	No
7.	Railroad Avenue &	A.M.	10.5	B	11.3	B	0.8	No
	Newhall Avenue	P.M.	15.4	B	25.2	C	9.8	No
8.	Valle Del Oro &	A.M.	12.6	B	12.2	B	-0.4	No
	Newhall Avenue	P.M.	9.8	A	9.6	A	-0.2	No
9.	Sierra Highway &	A.M.	57.7	E	57.1	E	-0.6	No
	Newhall Avenue	P.M.	40.3	D	41.0	D	0.7	No
10.	SR 14 Southbound Ramp &	A.M.	0.1	A	0.1	A	0.0	No
[a]	Newhall Avenue	P.M.	0.3	A	0.3	A	0.0	No
11.	SR 14 Northbound Ramp &	A.M.	0.2	A	0.2	A	0.0	No
[a]	Newhall Avenue	P.M.	91.7	F	91.7	F	0.0	No
12.	I-5 Northbound Ramps &	A.M.	23.2	C	23.4	C	0.2	No
	Lyons Avenue	P.M.	33.9	C	34.8	C	0.9	No
13.	Wiley Canyon Road &	A.M.	35.5	D	35.4	D	-0.1	No
	Lyons Avenue	P.M.	42.4	D	43.0	D	0.6	No
14.	Valley Street/Orchard Village Road &	A.M.	36.3	D	37.0	D	0.7	No
	Lyons Avenue	P.M.	39.3	D	40.1	D	0.8	No
15.	Newhall Avenue &	A.M.	36.1	D	34.0	C	-2.1	No
	Lyons Avenue	P.M.	33.1	C	32.7	C	-0.4	No
16.	Arch Street & 13th Street & Project Driveway #1	A.M.	New Intersection		31.1	C	N/A	No
[b]	& Project Driveway #2	P.M.			30.1	C	N/A	No
17.	Arch Street & 12th Street	A.M.	3.4	A	3.2	A	-0.2	No
[a]	& Placerita Canyon Road	P.M.	4.9	A	4.6	A	-0.3	No
18.	Dockweiler Drive &	A.M.	New Intersection					
[c]	Placerita Canyon Road	P.M.						
19.	Valle Del Oro &	A.M.	9.1	A	9.1	A	0.0	No
[a]	Dockweiler Drive	P.M.	8.3	A	8.3	A	0.0	No
20.	Sierra Highway &	A.M.	58.6	E	59.7	E	1.1	No
	Dockweiler Drive	P.M.	8.1	A	8.0	A	-0.1	No
21.	Sierra Highway &	A.M.	17.9	B	20.4	C	2.5	No
	Placerita Canyon Road	P.M.	16.0	B	18.0	B	2.0	No
22.	Sierra Highway &	A.M.	2.2	A	2.2	A	0.0	No
[a]	SR 14 Southbound Ramps	P.M.	6.4	A	7.1	A	0.7	No
23.	SR 14 Northbound Ramps &	A.M.	4.7	A	4.9	A	0.2	No
[a]	Placerita Canyon Road	P.M.	4.7	A	4.9	A	0.2	No

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is 2-way stop-controlled
[b] Future intersection to be constructed by the Project.
[c] Intersection would be constructed as part of the Dockweiler Extension.

Response to Comment No. O8-52

The comment questions what improvements would be required to achieve acceptable LOS at the intersection of Railroad Avenue and 13th Street if the railroad crossing upgrade is not implemented. The comment also claims that the Transportation Assessment failed to adequately address traffic congestion at the crossing or incidents causing undue delay.

Modifications to both the railroad crossing and the intersection of Railroad Avenue and 13th Street are part of the off-site improvements proposed by the Project and will be conditioned by the City as required for its Certificate of Occupancy. Delays at the intersection of 13th Street and Railroad Avenue due to train operations were included in the LOS analysis of this intersection. The number of trains per hour crossing 13th Street was estimated based on current train schedule and the and the amount of time per hour the crossing gates are lowered was subtracted from the time available to accommodate the traffic on 13th Street. Accordingly, the Transportation Assessment adequately addressed traffic congestion at the crossing, including delays due to train operations.

Response to Comment No. O8-53

The comment questions why some of the delays identified in Tables 18 and 19 of the Transportation Assessment appear to improve during future without Project conditions when compared to existing conditions. The comment also asserts that if the intersection capacity is the same as existing conditions and no improvements were implemented, with the additional traffic, the level of service and delay should generally get worse and not better.

Please refer to Response to Comment No. O8-50 above.

Response to Comment No. O8-54

The comment claims that no information on the methodology and software that was used for the roundabout analysis was provided. The comment acknowledged that a roundabout may not be suitable and appears to agree with the limitations of the roundabout during emergency evacuation conditions. The comment questions whether this limitation might also apply during typical operations due to the high traffic volumes.

The capacity calculation software used for roundabout analysis was the same software package as was used for all LOS analysis. The analysis was based on Synchro software for stop sign, signal, or roundabout intersections.

The Transportation Assessment is consistent with the above comment in that it points out that the roundabout would result in both operational and capacity concerns, particularly during evacuation conditions. These concerns are discussed in Appendices G and H of the Transportation Assessment (Appendix L of the Draft EIR).

Response to Comment No. O8-55

The comment claims that the Transportation Assessment did not include an analysis of future conditions without the Dockweiler Drive Extension Project. The comment recommends such analysis be conducted to determine the potential impacts of the Project without the roadway extension in place. The comment also asserts that since implementation of the Dockweiler extension depends on funding availability, it should be linked to the Project.

Contrary to the comment, the analysis of the Project traffic without the Dockweiler Extension in place is included in the Transportation Assessment and is shown in Table 18 on page 127 of the document (Appendix L of the Draft EIR).

As discussed in Response to Comment No. O8-25 above, the Project is not dependent on the Dockweiler Drive Extension Project. The Project would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, to provide additional roadway capacity and accommodate existing and future traffic volumes with the addition of Project traffic regardless of the completion of the Dockweiler Drive Extension Project.

Response to Comment No. O8-56

The comment claims there is no evidence that the level of service analysis for the intersection 13th Street and Railroad Avenue accounted for the railroad crossing and frequency and that the railroad crossing limits the capacity of the intersection and results in additional delay to impact the level of service and vehicular queues. Potential delays at the intersection of Railroad Avenue and 13th Street due to normal rail operations were included in the analysis. The capacity of the 13th Street lanes was adjusted by reducing the amount of time available to handle 13th Street traffic based on the amount of time per hour that the crossing gates would be down. Please also refer to Response to Comment No. O8-52 above.

Response to Comment No. O8-57

The comment claims that the Transportation Assessment failed to provide a figure showing the alignment of the Dockweiler Drive extension and how it connects to Placerita Canyon Road. It should be noted that the Dockweiler Drive Extension Project is not a part of the Project.

The City has produced many drawings showing the alignment of the Dockweiler Drive Extension Project. The requested connection to Placerita Canyon Road is shown in Figures 21 and 22 on pages 117 and 118 of the Transportation Assessment (Appendix L of the Draft EIR), as well as in the Tentative Tract Map included in Appendix B of the Draft EIR.

However, as mentioned in multiple responses above, the Project is not dependent on the Dockweiler Drive Extension Project. The Project would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, to provide additional roadway capacity and accommodate existing and future traffic volumes with the addition of Project traffic regardless of the completion of the Dockweiler Drive Extension Project. With regard to Placerita Canyon Road, if the Dockweiler Drive Extension Project is not implemented, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of the Draft EIR.

Response to Comment No. O8-58

The comment claims that the recommended prohibition of westbound U-turns at the intersection of Bouquet Canyon Road and Newhall Ranch Road negatively affects access to the existing land uses and Starbucks located at the southeastern corner of the intersection. The U-turn in question could be accommodated by turning right onto northbound Bouquet Canyon Road and making a

U-turn north of the intersection at Espuella Drive to be able to come back southbound, where a left-turn at the intersection would then allow a turn into the Starbucks parking lot.

Response to Comment No. O8-59

The comment questions whether the recommended addition of a fourth eastbound through lane at the intersection of Bouquet Canyon Road and Valencia Boulevard is feasible. This is the City's preferred improvement. The addition of a fourth eastbound through lane could be accomplished within the existing right-of-way by relocating the eastbound and westbound center medians slightly to the north and adjusting the lane widths of some of the through lanes.

Response to Comment No. O8-60

The comment questions whether the recommended improvement at the intersection of Sierra Highway and the SR-14 southbound ramps has been coordinated with Caltrans. The comment claims that improvements that would need to be reviewed and planned by Caltrans might take a long process to implement and asserts that the improvement might not get built or at least not built for a number of years, which affects the traffic analysis and reinforces the need for the Project to be linked to the construction improvements.

The proposed modifications to eliminate the median and provide an additional southbound left-turn lane at the intersection of Sierra Highway and the SR-14 southbound ramps have been studied and reviewed by Caltrans and the City, and a number of alternate configurations have been evaluated.

The intersection in question is projected to operate at Level of Service F in the afternoon peak hour in 2028 without the Project. The Project will contribute its fair share to the improvement of this intersection, and the City will work with Caltrans to get the improvement implemented.

Response to Comment No. O8-61

The comment questions whether the recommended improvement at the intersection of the SR-14 northbound ramps and Placerita Canyon Road has been coordinated with Caltrans. The comment claims that improvements that would need to be reviewed and planned by Caltrans might take a long process to implement and asserts that the improvement might not get built or at least not built for a number of years, which affects the traffic analysis and reinforces the need for the Project to be linked to the construction improvements.

Similar to the Response to Comment No. O8-60 above, modifications to the intersection of the SR-14 northbound ramps and Placerita Canyon Road have been the subject of numerous studies involving the City and Caltrans. If the Project is required to improve the intersection as a Condition of Approval, an improvement can be implemented.

The intersection in question is projected to operate at Level of Service E in the morning peak hour in 2028 without the Project. The Project will contribute its fair share to the improvement of this intersection and the City will work with Caltrans to get the improvement implemented.

Response to Comment No. O8-62

The comment claims that emergency evacuation routes need to be analyzed and provided and that a secondary/emergency access located on the west side of the Project Site is appropriate.

The comment also claims that the evacuation analysis appears to depend on and assume the Dockweiler Drive extension to be in place.

Secondary access to the west and north was investigated and determined to be unfeasible due to rail crossing issues, topography, and potential for neighborhood intrusion of Project trips. The evacuation analysis showed that the Project and all surrounding residents can be evacuated in a shorter time period with the Project and its roadway improvements than they could be under existing conditions. The evacuation analysis was performed both without and with the Dockweiler Drive Extension Project, and both with a roundabout and with a signal, and showed that the evacuation route involving 12th Street, Arch Street, and 13th Street would function better than existing conditions under all scenarios.

Please refer to Response to Comment No. O8-5 for an explanation of the Project's independent utility from the Dockweiler Drive Extension Project.

Response to Comment No. O8-63

The comment claims that Project traffic appears to be absorbed between Study Intersection Nos. 7 and 8. Figure 11 on page 89 of the Transportation Assessment (Appendix L of the Draft EIR) shows that 5 percent of Project traffic is absorbed between Study Intersection Nos. 7 and 8. There are numerous residential and commercial developments between Study Intersection Nos. 7 and 8 along Pine Street, Arch Street, and Race Street and to/from the businesses along Newhall Avenue itself. It is assumed that these developments would generate Project employees or induce travel to/from the commercial developments by employees.

Response to Comment No. O8-64

The comment questions whether it is valid to assume that more of the Project trips would be traveling through the City and local streets than traveling to and from the freeway considering that workers are mostly coming from outside of the City. The comment questions how the percentage of workers expected to live in the surrounding neighborhoods was calculated or what was the basis for the assumption. The comment asserts that a greater percentage of trips might need to be assigned to freeway ramps to more accurate access Project traffic and suggests that more traffic should be assigned to I-5 than SR-14.

Assuming the bulk of employees will come from outside of Santa Clarita and not use transit to reach the Project site is not accurate when considering the Project distribution based on the City's transportation model. The City's model, a subset of the SCAG regional model, was used in this traffic operational analysis in order to maintain consistency with the approved Dockweiler EIR. Both models investigated the distribution of residential and employment opportunities in the region and then used a gravity model to distribute those home-to-work trips to the Project Site.

In the case of the Project, the models calculated that approximately 50 percent of the employee commute trips would come from beyond the City limits and the other 50 percent from within Santa Clarita in 2028.

Figures 10 and 11 in the Transportation Assessment (Appendix L of the Draft EIR) show that 10 percent of the Project employees cross the Santa Clara River to the north while 40 percent enter or cross I-5 or SR-14. The majority of those use I-5 as suggested in the comment.

Response to Comment No. O8-65

The comment claims that a table showing the expected trip generation of the construction phase is lacking from the analysis of construction traffic. A discussion of the various construction phases and the accompanying number of trucks and the highest number of construction workers is included in the Transportation Assessment on pages 153 and 154 (Appendix L of the Draft EIR). The comment also calls for a passenger car equivalent (PCE) of 2.0 to be applied to the truck trips, but the Transportation Assessment showed that the average number of trucks in each of the three busiest phases of the construction sequence to be as follows:

Phase	Trucks per day
Hauling	7
Concrete Pour	15
Delivery	20

This level of truck trips does not warrant a separate numeric capacity evaluation, and, as such, a PCE of 2.0 would not change the results of such an evaluation.

Response to Comment No. O8-66

The comment claims that the parking analysis based the parking demand for the studio-related uses on light manufacturing use without providing an explanation as to why this was appropriate. The comment recommends the parking analysis be based on study of similar sites and studios.

Site-specific parking requirements were discussed with City staff, and the methodology shown in the study was approved by City staff. Table 1 of the Parking Analysis Form (included in Appendix B of the Transportation Assessment) categorized each land use component of the Project into the closest land use category in the City's UDC parking requirements so that a calculation of the UDC parking requirements could be developed. In completing the Parking Analysis Form, it became evident that the land use that had the closest parking code requirements to the actual parking demand patterns of the studio uses was the Light Manufacturing land use. Accordingly, UDC Code Section 17.44.101.11a was applied to those land uses within the Project.

As the comment suggests, the parking analysis was based on comparable studio parking demand rates derived from other Southern California studio campuses (NBCUniversal, CBS Television City, Paramount Pictures Studios). These rates and the total parking demand analysis using these empirical rates are shown on Table A-1 in the Parking Analysis Form.

Response to Comment No. O8-67

The comment questions the parking analysis conducted for the Project. The use of the shared parking model is an appropriate tool for the analysis of the parking demand for this Project. As described in the Parking Analysis Form, the shared parking analysis was conducted to confirm the Code analysis summarized in Table 1 of the Parking Analysis Form. The shared parking model was simply used as a tool to keep track of the parking demand patterns for each individual land use within the Project on an hour-by-hour basis throughout the day. This allowed the identification of the combined busiest hour of the day, which provides a good comparison to the adequacy of the overall Code requirements.

As shown in the summary of the shared parking demand (Exhibits B-1 through B-6 in Attachment B of the Parking Analysis Form [Appendix B of the Transportation Assessment]), there was no internal capture assumed for office, stage, stage support, or warehouse/storage land uses. Each of these land uses generated separate and distinct parking demand patterns, and no assumption was made regarding the sharing of parking between or among these land uses. Again, the parking demand for these individual land uses (both peak rates and time-of-day patterns) was based on empirical parking demand data from other Southern California studio campuses.

The only on-site land use that took "credit" for shared parking on-site was the food service category. The food service rate was reduced to only account for employee parking demand because the "customers" of the food service section would exclusively be employees of the studio, and those employees have been accounted for in the studio parking demand. The food service facilities are not open to the public and would not generate parking demand outside of the employees required to operate the service.

Response to Comment No. O8-68

The comment summarizes the scope of the Mr. Lewin's review and the existing conditions of the Placerita Canyon and Circle J communities that are in the vicinity of the Project. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no further response is required.

Response to Comment No. O8-69

The comment states that Section 4.8, Hazards and Hazardous Materials, of the Draft EIR incorrectly concluded that Project impacts related to exposure of people or structures to significant risk of loss, injury, or death involving wildland fires would be less than significant without mitigation. The comment states that further analysis will determine that impacts on the surrounding communities would be significant and that mitigation measures are required, including the completion of the Dockweiler Drive Extension as part of the first phase of the Project.

As discussed in Response to Comment No. O8-25, an extensive evacuation modeling analysis was conducted that evaluated a worst-case wildfire or other emergency that would require the evacuation of the Placerita Canyon area, including homes, schools, and businesses. The analysis accounted for the existing population in the Placerita Canyon community and evaluated evacuation times both without and with the Project to determine the Project's impact during an evacuation event. The analysis also assumed that no evacuation would occur via Placerita Canyon Road or the future Dockweiler Drive connection. The Project, independent of the Dockweiler Drive Extension Project, would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street; these improvements were taken into account to determine potential evacuation impacts on the Placerita Canyon Community. These improvements, which include a signalized intersection design at 12th Street and Arch Street, were determined to provide for the most efficient traffic operations under an evacuation scenario when compared with the roundabout or existing conditions. In addition, the signalized intersection design was determined to provide the horse trailers with additional roadway capacity and easier maneuverability through the corridor. Project improvements would facilitate evacuation and not create dead-end road situations within the communities as asserted in the comment.

Response to Comment No. O8-70

The comment is introductory and references fire behavior analysis conducted by a third-party. The comment claims that this study further corroborates, along with the fire behavior analysis contained in the Draft EIR, the significant threat that wildfires pose to the neighborhoods adjoining the Project. Fuel Modification Plan will be submitted to LACoFD for review and approval prior to issuance of building permits. The Fire Prevention Plan will be submitted with the Fuel Modification Plan.

It should be noted that the Project would change the existing conditions of the Project Site, as the entire Project Site would either be developed with impervious surfaces or managed landscape areas. As such, the risk of wildfire on the Project Site would be reduced through development of the proposed structures and improvements as compared with existing conditions. By converting the flammable landscape currently existing on the Project Site to a development featuring hardscapes, sound stages, support and ancillary buildings, and irrigated/managed landscaped areas, the Project would reduce fuel loads found on the Project Site and, thus, reduce the chances of a wildfire occurring or intensifying on-site and threatening surrounding properties.

Response to Comment No. O8-71

The comment provides a list of significant fires in the Santa Clarita Valley, references and quotes the fire history presented in the Draft EIR and in the Project's FPP, and provides articles and photos from past wildfires. However, the comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. O8-72

The comment accurately summarizes information presented in the Draft EIR and introduces results of a 3rd-party fire behavior analyst, which significantly conform with the Draft EIR's FPP fire behavior modeling results. The comment states differences between the Project's structures, which would be built to the latest ignition resistant requirements, and those of the surrounding community, which include buildings constructed before the ignition resistant requirements were codified. Lastly, the comment expresses the opinion that the existing communities would be further impacted during wildfires due to the additional Project population in the area. On the contrary, the FPP's modeling results showed that fire potential on the Project Site would be lower than existing conditions due to fire safety requirements, to which the Project would comply. The fire risk assessment of the Project area also determined that with "the conversion of the existing landscape to ignition-resistant development, wildfires may still encroach upon and drop embers on the site but would not be expected to burn through the site or produce sustainable spot fires due to the lack of available fuels." The fire risk assessment also concluded that the Project "would not facilitate wildfire spread and would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the site's structure, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape."

The comment does not provide new information or substantial evidence to demonstrate that the impact analysis in the Draft EIR is inadequate for the reasons provided in Response to Comment No. O8-25. Therefore, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-73

The comment acknowledged that the EIR correctly demonstrated that the evacuation of the Project Site itself will be adequately addressed, but the comment incorrectly assumes that the evacuation analysis showed inadequate evacuation conditions for the neighboring communities. Please refer to Response to Comment No. O8-25 for an in-depth discussion of the extensive evacuation modeling that focused surrounding on the evacuation of the Placerita Canyon neighborhood.

The comment argues that the neighborhood all the way to the Sierra Highway should be included in the evacuation shed analyzed by the Project. The boundaries of the evacuation shed focused specifically on the existing Placerita Canyon neighborhood that would evacuate through the intersection of 13th Street and Railroad Avenue. This comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-74

The comment misinterprets the evacuation analysis to assume that the analysis includes the full use of the Dockweiler Drive Extension and states the Dockweiler Drive Extension should be required as the first phase of the Project. As described in the Response to Comment No. O8-25 above, the evacuation analysis assumed that the Project and the neighboring communities would not have access to the Dockweiler Drive Extension Project and would only evacuate through the intersection of 13th Street and Railroad Avenue.

The improved Dockweiler Corridor cited in the Traffic Evacuation Assessment refers to the stretch along the Project frontage, which comprises 12th Street, Arch Street, 13th Street, and Railroad Avenue, and not the Dockweiler Drive Extension Project. Accordingly, the comment incorrectly identifies the improvements that the Project would be required to implement. Evacuation times would be improved as a result of the off-site improvements proposed by the Project, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, and independent of the Dockweiler Drive Extension Project.

The comment calls for an additional evacuation route; however, based on the evacuation analysis, the Project, with the roadway improvements described above and in Response to Comment No. O8-25, will reduce the existing evacuation time.

Response to Comment No. O8-75

The comment raises concerns over the impacts that pet and livestock evacuations may have on evacuation times. Although evacuation planning attempts to include the needs of pets and animals, the primary responsibility of public agencies is the protection of human life and prevention of loss or damage to property. Primary responsibility for evacuation of pets and animals ultimately rests with the owners of such animals.

While livestock evacuations may add time to an evacuation event, analysis of the potential delay would be speculative and dependent on the wildfire event, its spread rates, spread direction, and area evacuated. Regardless of the potential evacuation time delay, the road network improvements provided by the Project would improve the evacuation condition from its current condition. As discussed in Response to Comment No. O8-23 above, the Transportation Assessment evaluated in detail both the roundabout design and the signalized intersection design at 12th Street and Arch Street and determined that the 1-lane roundabout design would have less

capacity for evacuation operations than a traffic signal and would have geometric constraints that do not accommodate horse trailers as easily.

Response to Comment No. O8-76

The comment raises concern over fire department access to the Placerita Canyon community during an evacuation event. Fire Department access, as described in the comment, is an existing condition that is not exacerbated by the Project. Depending on the nature of the evacuation (e.g., short notice versus long notice events), law enforcement personnel managing the evacuation would determine the preferred approach for resident egress and firefighter ingress. Typically, evacuation traffic is designated such that one inbound lane is available for emergency response. There may be scenarios where multiple lanes are designated for evacuating vehicles and inbound fire apparatus may be considered unnecessary or lower priority than moving vehicles out of the area. These decisions are often field and situation specific and cannot be determined within a Project-level evacuation analysis. The evacuation analysis has determined that with the Project and its off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, evacuations would be faster than they are currently.

The comment's concern is an existing condition that is not made worse by the Project and, therefore, does not result in the need for additional analysis or revisions to the Draft EIR conclusions that were found to be less than significant.

Response to Comment No. O8-77

The comment provides an opinion that the Project's off-site road improvements should be constructed/improved prior to the start of Project construction. It should be noted that the recommendation cited in the comment that "prior to bringing lumber or combustible materials onto the project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones established" was incorrectly attributed to the L.A. County Fire. This was a recommendation in the Project's FPP and is included as Project Design Feature PDF-WF-2 in Section 4.17, Wildfire, of the Draft EIR. The comment further states that the established roads in the surrounding communities are inadequate and would be exacerbated by the "addition of the 2,400 employees of the Shadow Studio who will further add to emergency evacuation impacts to the egress routes during an emergency. Therefore, it would be an important mitigation that prior to construction of the Project, installation of the Dockweiler Extension be completed to significantly improve the evacuation rate of the neighboring communities." As described in the Response to Comment No. O8-76 above, the Project includes off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, which would add more capacity to the roadway system that would facilitate evacuation of the adjacent Placerita Canyon neighborhood.

Response to Comment No. O8-78

The comment incorrectly suggests that the roundabout may provide better flow in an emergency evaluation situation than an unmanned traffic signal because the traffic could flow smoothly through the roundabout. It is likely that the traffic signal would be staffed by emergency personnel at the Arch Street and 12th Street intersection because of the critical nature of this location. If personnel were not available, the traffic signal would likely be turned to a flashing operation to facilitate exit

from Placerita Canyon. The design of the signalized operation would provide two westbound lanes at Arch Street as compared to the single-lane westbound approach under the roundabout design. The additional westbound capacity is the main reason for the exit time reduction under the traffic signal option. In addition, the large vehicles moving animals and horse trailers would have more difficulty maneuvering through the geometrics presented by the single-lane roundabout.

Response to Comment No. O8-79

The comment summarizes its opinions and statements from previous comments and provides a summary of the Draft EIR's impact thresholds that have been found to be less than significant. The comment further expresses confusion regarding the Dockweiler Extension Drive improvements and states that several significance determinations rely on the Dockweiler Drive Extension. The evacuation analysis presented in the Draft EIR (see Appendix H of the Transportation Assessment, which is included as Appendix L of the Draft EIR, and Appendix N of the Draft EIR) studied worst-case conditions by assuming that the Dockweiler Extension would not be constructed or would be closed south of 12th Street due to the emergency. The evacuation analysis clearly shows that the improved evacuation route along 12th Street, Arch Street, and 13th Street as a result of the Project's off-site improvements would provide sufficient capacity to accommodate the evacuation of both the Project and the neighboring communities without the completion of the Dockweiler Drive Extension. Please refer to Responses to Comment No O8-68 to O8-78 for detailed responses. This summary comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O8-80

The comment reiterates that animal evacuations be considered as part of the evacuation modeling. Please refer to Response to Comment No. O8-75.

Response to Comment No. O8-81

The comment recommends a review of the determination of whether the Dockweiler Drive and 12th Street intersection could be more effective as a roundabout instead of a signalized intersection. This evaluation has already been completed and is presented in Appendices G and H of the Transportation Assessment, which is included as Appendix L of the Draft EIR. Appendix G provides a comparison of the operation of the roundabout versus the traffic signal while Appendix H provides a discussion of both designs under evacuation conditions. Pages 78 through 85 of the Transportation Assessment provide a summary of the performance of the two designs. The analyses concluded that the traffic signal design would operate more efficiently under peak hour traffic conditions and under evacuation conditions. Thus, the analysis of the performance of the two designs has already been completed and included in the Draft EIR.

Response to Comment No. O8-82

The comment presents the fire behavior analysis conducted by Mr. Tim Chavez. The analysis identified the factors that are considered in a fire behavior analysis, including topography (e.g., terrain, slopes), ground cover and fuels in the area, wind direction, wind speed, and fuel moisture. The comment identifies the scenario of most concern in the Project area involves a late season wind driven fire originating from the north and/or east of the Project Site. The comment identifies the flame lengths and rate of spread. However, the comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

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LETTER O9

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY
AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386
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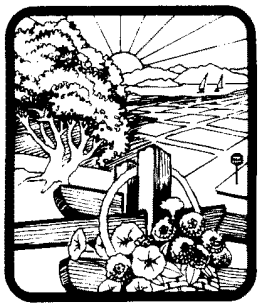

5-22-23

Erika Iverson, Planning
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Sent via email to eiverson@santa-clarita.com

Re: Newhall Studio Project 21-109 Request for an extension to review the EIR and DEIR initial comments
Please copy to all members of the Planning Commission

Dear Ms. Iverson and Planning Commission Members

SCOPE is a planning and conservation non-profit group now celebrating its 35th year of work in the Santa Clarita Valley.

These comments are timely filed on May 22nd; however, we continue to request additional time to comment (see below).

This project proposes to build a huge industrial development on an area of floodplain currently zoned for housing. It will fundamentally change the character of the Newhall neighborhood and old town district which the City has strived to create and which the City has spent enormous amounts of public funds to promote. It will destroy a number of oaks including several iconic and rare heritage oaks located in the middle of this flood plain which are older than the town of Newhall itself. It is also inconsistent with a number of existing Plans previously approved by the City as well as being inconsistent with several General Plan goals. Instead of providing mitigation measures for many significant impacts, the plan merely waves these away by pretending that impacts don't exist or providing narrative in the EIR with no corresponding mitigation measures to back up these assertions. **O9-1**

The EIR was released just prior to the Easter and Passover holidays when many people had their minds on family and religious celebrations and thus may not have been aware of its release. It is also a massive document requiring a great deal of reading and research.

Due to all of these factors and the importance of widespread community involvement on a project that will so dramatically change the character of an existing neighborhood and change an existing plan to no longer provide much needed housing, we continue to request that you extend the comment period to at least 120 days for this document.

It is vitally important that you receive input from a wide variety of community members on this project and that community members have adequate time to provide you with a full array of information to help you make the best decision for our community.

Overall Inadequacy of the DEIR.

O9-2

The purpose of an EIR is to inform the public and its responsible officials of the environmental consequences of decisions before they are made. (*Laurel Heights Improvement*

Assn. v. Regents of University of California (1993) 6 Cal.4th 1112, 1123, 26 Cal.Rptr.2d 231, 864 P.2d 502.)

This is a very large film studio project located next to a rural, equestrian zoned community. It is currently vacant land zoned for much needed housing in the form of a mixed-use development. The project will require a zone change, conditional use permit a permit for oak and hillside destruction, creek alteration permits, railroad crossing permits, etc. and will not comply with the circulation plan or traffic requirements until the very expensive, unfunded Dockweiler Extension is built. The current plan under approved zoning, would avoid much of these impacts and create a park area around the creek.

The Notice of Preparation for the new studio document lists many areas of concern and finds the majority of them as potentially significant (see Appendix A). The opening summary of the EIR also lists many areas of controversy including aesthetics, air quality, biological resources, hydrology and water quality, landuse, noise, public services, and transportation/traffic. Oddly though, this EIR for the most part (with the exception of biological, tribal and paleontological impacts) finds that there are no significant impacts and no mitigation requirements are needed. This is absurd on its face. A huge 24/7 industrial project that will require some 2500 parking spaces, massively increase the allowable building heights beyond current City Standards in an area that is currently vacant land will have a major impact on noise, light, aesthetics, traffic, GHG and air quality as well as other areas. **O9-2 Continued**

The purpose of an EIR is to inform the public and its responsible officials of the environmental consequences of decisions before they are made. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1123, 26 Cal.Rptr.2d 231, 864 P.2d 502.). To claim that such a large project has no impacts and that therefore no mitigation is required, allows the project proponent and the City, (should they approve this EIR) to avoid firm and enforceable mitigation requirements for our community. In failing to inform the public, as required by law, it deprives the public and decision makers of the assurance that proposed improvements will really come to pass.

General Plan Inconsistency

Our General Plan was updated in 2012. It did not include a large industrial project on this property, but instead the area is zoned for the much-needed housing. Thus, a general plan amendment is needed. Therefore, this project is not currently consistent with our General Plan. However, the document brazenly states multiple times that is consistent in all areas even though it will not be consistent until numerous permits to allow this inconsistency are granted. This constitutes a failure to disclose the real and major impacts of this proposal. **O9-3**

Inconsistency with the Circulation Plan. The Circulation Plan's most recent update, (the Dockweiler Extension which is fully approved and CEQA certified, but unfunded and unbuilt), must now be changed. The Dockweiler extension (completed in 2018 after negotiations with the community), must now be changed to eliminate key provisions of traffic calming measures such as the Roundabout and other measures. The Dockweiler Extension EIR allowed significant additional traffic through existing neighborhoods, with mitigation provided through these calming features. However, it was completed well before this project was ever proposed and did not include the large amount of additional traffic that will be generated with this proposal. We submit that these changes cannot be arbitrarily made without additional public review and input to the Dockweiler Extension project EIR. Thus, we believe that the statement made on ES-21 **"Threshold 4.14(e):** The Project would not conflict with an applicable plan, ordinance, or policy **O9-4**

establishing measures of effectiveness for the performance of the circulation system,…etc. is inaccurate on its face and must be corrected in the FEIR. Additionally, the Dockweiler Traffic analysis[1] does not correlate with the Traffic Assessment on which this industrial project is based. Which study is correct?

O9-4 Continued

Inconsistency with emergency planning required in the Circulation Plan - Fire Evacuation

o Objective C 2.5: Consider the needs for emergency access in transportation planning.

 Policy C 2.5.2: Ensure that new development is provided with adequate emergency and/or secondary access for purposes of evacuation and emergency response; require two points of ingress and egress for every subdivision or phase thereof, except as otherwise approved for small business subdivisions where physical constraints preclude a second access point.

Threshold 4.8(g): Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

This project is in a High Fire Hazard Severity Zone. The DEIR state that "An emergency could require partial or total evacuation of the Project Site and/or sheltering in place for some parts of the community. The City's existing emergency response system would be sufficient to address emergency evacuation scenarios in the event of natural or man-made incidents in the Project area that result in a need to evacuate some or all of the existing residents of the adjacent communities and future Project employees."[2] The City did not include this project in its Emergency Planning, since the project had not even been proposed then. ***The EIR must describe an evacuation plan for its employees and the existing adjacent residents.*** This is a deficiency.

O9-5

"The Project would utilize several exits in the event of evacuation, including the main entrance and two other access-controlled gates, one located immediately east of the main entrance at the eastern leg of the intersection of Arch Street and 13th Street, and one along 12th Street immediately east of the proposed gym building."[3] ***The EIR must describe how this will impede evacuation of adjacent residents.***

The EIR also depends on modifications to the Dockweiler Drive Extension Project which has not been built and completion of which is not a mitigation requirement for the project. It also d relies on instructions from the from local emergency management authorities instead of proposing an evacuation plan.

The project finds there will be not impact because it doesn't interfere with any emergency protocols, however it has not analyzed how everyone, including employees and neighbors would get out all at once in the event of a fast-moving wildfire. We assert wildfire is a significant impact requiring analysis and mitigation fir this project that adds 3000 employees at the entrance to a canyon neighborhood in a severe high fire hazard zone.

Inconsistency with the Beautification Master Plan

This Plan addresses concepts for streetscape design, landscape enhancement, gateways, and monumentation and signage, on both a regional and a community scale. The plan strives to maintain the identity of individual communities while unifying the entire City through design.

O9-6

The Proposed Project area is included within the Newhall community portion of the Beautification Master Plan area, which describes the Newhall community as one with roots in oil and gold extraction and western movie production, industries that strongly contribute to the community's identity. The Newhall area is also concerned about Oak Preservation as is indicated

[1] https://filecenter.santa-clarita.com/EIR/Dockweiler_2018/Appendix%20B_Addendum%20Traffic%20Impact%20Study.pdf The Dockweiler Extension documents are hereby incorporated by refence in their entirety as refence s for our comments

[2] DEIR, p. 4.8-13

[3] *Ibid.*

by the two special standard districts located within the Newhall area that include oak tree preservation in their regulations. The Beautification Master Plan identifies Railroad Avenue (identified in the plan as San Fernando Road) as a first priority primary corridor and recommends beautification treatments, such as landscaping. Additionally, the Project Site is adjacent to the Old Town Newhall area, which generally extends where the City has spent extensive public funds to create a pedestrian friendly multi-use "old Town mixed use shopping district. Originally settled in 1878, Old Town Newhall is characterized by its "old town" atmosphere, with a compact and walkable character and emphasis as an arts and entertainment district Siting this massive industrial project with building heights that exceed general plan limits and a huge wall that will face Railroad Avenue will not enhance the area and may depreciate the value of the Old Town Newhall properties.

O9-6
Continued

This Plan is inconsistent with the Open Space and Conservation Element of the General Plan and has significant impacts to aesthetics. The combined Conservation and Open Space Element establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses community benefits derived from open space, such as providing land for park and recreational facilities, habitat preservation, scenic views, and water recharge and watershed protection. The Conservation and Open Space Element states that rivers and streams located within the valley's canyons "provide scenic visual relief from urbanization". Placerita Creek transects the northern portion of the Project Site, and is a tributary to the south fork of the Santa Clara River. It's floodplain also provides ground water recharge and a wildlife corridor for animals to access the Santa Clara River, and a major wildlife connection between the San Gabriel, Santa Susana And San Padres mountain ranges which the DEIR failed to discuss and to mitigate impacts on it.[4]

O9-7

. Instead of preserving and enhancing the creek as proposed for the Alternative 2 housing project, no one will be able to even see the creek and its Northern floodplain will be turned into a parking

[4] Mitigation must include setbacks, riparian re—vegetation for cover, light glare reduction, and any other mitigation that the Fish and Wildlife Dept. would suggest.

lot. This is not consistent with the Open Space element or the Placerita Canyon Special Standard District.

Scenic resources on the Project Site include a prominent ridgeline, which runs along the northeastern portion and boundary of the Project Site and Placerita Creek and its floodplain area that traverses the Project Site. The ridgeline, which is considered a "significant ridgeline" in the Conservation and Open Space Element, rises to a height of approximately 1,343 feet above mean sea level at its northern tip and 1,320 feet above mean sea level at the point where the ridgeline intersects the eastern boundary of the Project Site. This ridgeline is approximately 80 to 110 feet above the flat, central portion of the Project Site and surrounding areas, and slopes downward to the southwest toward Placerita Creek and the creek wash area, which ranges between 70 and 170 feet wide. The project will impact this ridge line which is not consistent with the Open Space and Conservation element. It is incorrect to state that the project is consistent with this element when major impacts to it will occur.

O9-7 Continued

Threshold 4.1(a): Would the project have a substantial adverse effect on a scenic vista?
The answer is yes, despite the EIR claiming consistency and no impact. Visuals provided in the EIR on figures 4.1-4 and others, including the cover of the EIR make it obvious that the ridgeline and creek will no longer be visible to the public. This is a significant impact, not consistent with the general plan, and must be addressed.

Traffic

As previously stated, the Dockweiler extension is not built. It must include an expensive bridge over the railroad tracks because the PUC would not grant a permit for an at grade crossing. The EIR traffic analysis bizarrely analyses the impacts of this project as though this extension and other upgrades are already completed, and thus finds that NO mitigation measures are required. In fact, the project transportation plan will be a significant impact unless and until the Dockweiler Extension is completed, but this fact is not disclosed to the decisionmakers or the public in the DEIR. Instead they are told that there will be no impacts and no mitigation is required.

Thus, a mitigation measure ensuring the completion of this extension prior to the start of the project must be required.

O9-8

Additionally, there is a potential for traffic stacking at the 13th St. entrance that may potentially back up across the rail road tracks. Again, we express our concern that the PUC did not weigh in on the NOP and may not even have been advised of this project that could affect their railroad crossing. Although this EIR states that minor railroad crossing improvements will be made (page 2.0-22), it doesn't analyze the stacking problem, and whether these improvements would reduce the impacts and danger to **vehicles** and railroad passengers at this entrance, AND they are not listed as mitigation measures. We do not believe that the increased traffic from this project has been disclosed to the PUC, whether a permit for all this additional traffic crossing the tracks has been obtained from the PUC or whether the PUC was even notified of this project and the potential issues with the railroad crossing. It is our understanding that any changes made to a railroad crossing will have to receive PUC approval. This issue was brought up at during the NOP comment period but the proponent has failed to include it in the EIR. This is a public health and safety issue and should have been disclosed and analyzed in the EIR.

Greenhouse Gases and Climate Change

The EIR fails to acknowledge or discuss the City's 2012 Climate Action Plan that requires returning to a baseline 0f 2006 emissions.

O9-9

The EIR makes a cursory opening description of rising GHG impacts but fails to substantially discuss wildfire, an impact which relates to this project and its evacuation plan. Wildfire risk in California will increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season would directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012). Wildfire information should have been included as a GHG impact since it is relevant to other areas of the EIR.

Mature oaks, especially heritage trees have sequestered large amounts of carbon. The carbon produced from removing those 7 heritage oaks and others should be included in GHG construction generation figures, in case they are permitted to be removed as requested.

Again, even though the project will produce a substantial amount of GHG by means of the numerous trucks and other heavy vehicles that will be used on the site as described in the GHG generation tables and parking spaces for some 2500 cars, the DEIR states that no mitigation requirements are needed. This project will increase both GHG and air pollution, but no mitigation measures are included because the EIR found there were no impacts, apparently because there are no defined threshold limits? Again, this is beyond absurd.

O9-9 Continued

Instead, “design features” such as solar roofs and electric plug in recharge stations are listed. While these are laudable, they should be required mitigation measures. A “design feature” is not a mitigation measure. Since it is not enforceable and can be changed by any future Council or just not enforced, the public cannot rely on a “design feature” to mitigate an impact.

Further, specificity in the mitigation measures must be required, such as square feet of roof top solar, energy generated and number of charging stations. The plan also seems to rely on existing public transportation rather than encouraging company related strategies in a plan of its own (such as bike to work and carpooling or van pools). However, nothing is required.

Some strategies that could be incorporated into mitigation requirements to reduce VMT for this project are:

- Offer employees financial incentives to carpool, use public transportation, or use other modes of travel for daily commutes.
- Require the development of commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.
- Develop shuttle systems around business district parking garages to reduce congestion and create shorter commutes.
- Create an online ridesharing program that matches potential carpoolers immediately through email

Significant Impact to Light and Glare not mitigated

O9-10

While the EIR admits to understanding both the light requirements of the Placerita Special Standards District and the City lighting ordinance, it goes on to describe architectural lighting elements that clearly don’t abide by either of these standards.

‘The Placerita Canyon Special Standards District (SCMC Section 17.39.020) and the City of Santa Clarita’s outdoor lighting standards (SCMC Section 17.51.050, Outdoor

Lighting Standards) require all lights to be directed downward and be shielded so as to avoid off-site glare. The Project would install light fixtures with site-specific features to reduce glare, while maintaining a safe environment for pedestrians and vehicle traffic and a "dark sky" environment. Exterior fixtures would not be "drop lens" type fixtures or exposed source lighting fixtures. Pole lighting and building-mounted lighting fixtures would consist of cut-off fixtures with minimal light spillage to immediately adjacent areas within the Project Site and no light spillage beyond the boundaries of the Project Site."

Threshold of Significance 4.1(d): Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

On a property that currently has no development, this project will unavoidably significantly impact the light and glare and affect the night sky and create glare to adjacent residences. in contradiction to part A.4 of the City lighting ordinance. [5]

While the DEIR states that it will not use some of the specifically prohibited light fixtures, it makes no commitments in for form of mitigation measures regarding the most important City admonition – that all fixtures must be directed downward and no light spillage will occur into adjacent neighbor hoods. [6] I.e., This paragraph does not guarantee that all lights will be directed downward or that light trespass won't occur because no conditions or mitigation measures were incorporated to ensure this outcome. The EIR merely waves away this significant impact with a magic wand. One cannot mitigate a significant impact by merely stating in the body of the EIR that it won't exist.

O9-10
Continued

Bio Resources

Section 17.51.040 Oak Tree Preservation

SCMC Section 17.51.040 states that the beauty of natural areas within the Santa Clarita Valley is enhanced by the presence of large numbers of native oak trees. The preservation ordinance outlined in SCMC Section 17.51.040 "contributes to the welfare and aesthetics of the community and retains the great historical and environmental value of these trees." Further, 17.51.040 states that these oak trees "lend beauty and charm to the landscape, enhance the value of property, and preserve the character of the communities in which they exist."

This project will destroy 7 heritage oaks, older than the town of Newall without even the attempt to incorporate them into the project plan, along with almost all other oaks on the project site, which is inconsistent with our oak preservation ordinance. Including them would not only provide consistency with the General Plan Open space element, but also contribute to needed support in the community for this extremely impactful project. While the City may want your tax dollars, the community would prefer to have our oaks. You can address both issues by incorporating the heritage oaks into your project, thus complying with the oak ordinance by preserving them.

O9-11

The Oak Ordinance was the first ordinance passed by the City after its incorporation in 1987. We have an oak on the City Seal. Yet developers routinely propose to destroy all our oaks. It is time for the City to say no to oak destruction, since it does not comply with our general plan. If

[5] From City Code lighting standards - "Reduce light pollution and preserve the nighttime environment."

[6] From City Code lighting standards - General Requirements a. Shielding. All lighting shall be directed downward and be of a cut-off design so the luminary and/or lens do not protrude below the luminary housing and is not visible from a public right-of-way. b. Light Trespass. Lighting may not illuminate other properties and shall be directed downward to prevent off-site glare.

the City supports this plan, they should support Alternative 3 and preserve additional oaks as well as a set back from the creek.

Also please see above regarding the failure to discuss the impacts proposed to Placerita Creek on the wildlife corridor. This issue needs to be disclosed and discussed in the EIR. O9-11 Continued

Noise Impacts

Since the EIR states there will be no impacts despite the fact that the project is sited on vacant land where there currently is no noise generation except for very occasional vehicular parking for an event, we fell it is important to remind you that your failure to disclose noise impacts and address them now, could result in future lawsuits. You may therefore want to fully disclose traffic and other noise an provide mitigation for those affected now instead of facing lawsuits later. We therefore provide below the state codes on noise:

California Health and Safety Code 46000

The Legislature hereby finds and declares that:

(a) Excessive noise is a serious hazard to the public health and welfare. (b) Exposure to certain levels of noise can result in physiological, psychological, and economic damage. (c) There is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. O9-12

(d) Government has not taken the steps necessary to provide for the control, abatement, and prevention of unwanted and hazardous noise.

(e) The State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise.

(f) All Californians are entitled to a peaceful and quiet environment without the intrusion of noise which may be hazardous to their health or welfare.

(g) It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare. To that end it is the purpose of this division to establish a means for effective coordination of state activities in noise control and to take such action as will be necessary to achieve the purposes of this section.

(Added by Stats. 1975, Ch. 957.)

This facility will produce noise levels far exceeding the level of the now vacant lot. Yet you have refused to acknowledge and address these serious impacts in the EIR. This is an EIR deficiency. You need to disclose these impacts and mitigate the noise to the surrounding neighborhood.

Conclusion

The willingness of the City to consider up ending its many laudable ordinances and general plan requirements for this project is distressing. The conclusion that most of the potential impacts don't even require mitigation is baffling for a project of this size located in a residential neighborhood of a character that, at least in theory, the City has taken great pains to protect over the years. The project could work here, but not on the scale proposed and not without some real mitigation measures proposed to protect our community. We prefer and have previously supported the original zoning on this site, which is alternative 2. If you must have this project, please vote for the reduced size, preferred environmental alternative 3 and include setbacks to the creek and inclusion of some of the heritage oaks into the project. Please don't destroy the beauty of our community and ignore our general plan for increased tax dollars that with all the credits for movie production, may not even be there. We did not have adequate time to complete our full evaluation of this project, including biological resources. We will be submitting O9-13

additional comments in that area. Although you are not required to respond to them, we remind both you and the City, that you are still required to consider them. O9-13 Continued

Thank you for your careful evaluation of this matter.

Sincerely,

Lynne Plambeck,
President

Letter No. O9
Lynne Plambeck, President
Santa Clarita Organization for Planning and the Environment
P.O. Box 1182
Santa Clarita, CA 91386

Response to Comment No. O9-1

The comment provides an introduction to the Santa Clarita Valley Organization of Planning and Environment (SCOPE). The comment asserts that the Project proposes to build a huge industrial development on an area of floodplain currently zoned for housing. It should be noted that the majority of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The Project is permitted in the MXN zone with approval of a Conditional Use Permit (CUP).

The comment also asserts that the Project will fundamentally change the character of the Newhall neighborhood and old town district. While the Project Site is also located within the Placerita Canyon Special Standards District (PCSSD), there is nothing in the PCSSD that would preclude the Project Site from operating as a studio. The PCSSD does not regulate the types of uses allowed on a property. A studio use can be permitted within the PCSSD. As described in Section 2.0, Project Description, of the Draft EIR, the proposed buildings have been designed to be consistent with the Old Town Newhall Specific Plan standards, including its development standards and architectural style standards. In addition, as discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would implement the following components in accordance with the provisions of the PCSSD:

- The Project would be internally and externally pedestrian-oriented with bicycle amenities and accommodations. The Project would construct a Class I trail along the Project frontage at 12th Street, Arch Street, and 13th Street and would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to a future Class I trail along Railroad Avenue and future connection to the Jan Heidt Newhall Metrolink Station and various retail, commercial, and entertainment uses in Old Town Newhall to promote a pedestrian friendly environment.
- The Project would include a defined entry gateway with landscaping and architectural elements with signage.
- The Project would utilize the MWD right-of-way behind the residences that front on Alderbrook Drive as a plant nursery, which would provide a transition between the residential uses immediately east of the Project Site and the Project.
- The majority of the Project's landscaping would use drought-tolerant trees.
- The proposed buildings would provide 360-degree architectural design with pedestrian-scaled building massing and forms.
- The Project would develop buildings with varied heights, ranging from 18 feet for the catering buildings to 55 feet for the sound stages, as permitted upon extension of the boundaries of the Jobs Creation Overlay Zone to incorporate the entire Project Site.

Furthermore, the Project would be required to undergo several City processes prior to Project approval, including architectural design review, development review, landscape plan review, and

hillside review, to ensure that the Project complies with the requirements of the PCSSD and is compatible with the surrounding area, particularly the residential uses immediately east of the Project Site in Placerita Canyon.

The comment also states that the Project will destroy a number of oaks, including several iconic and rare heritage oaks located in the middle of the flood plain that are older than the town of Newhall itself. According to the Protected Oak Tree Report prepared for the Project (included in Appendix D of the Draft EIR), of the seven heritage oaks that would be removed, the condition of five was rated C- or D.[38] The Project would replace the 13 oak trees to be removed trees with 211 oak trees, including coast live oak, Engelmann oak, valley oak, and southern live oak.

The comment claims that the Project is inconsistent with a number of existing Plans previously approved by the City, as well as being inconsistent with several General Plan goals. The Project's consistency with land use plans, including, but not limited to, the City's General Plan, Old Town Newhall Specific Plan standards, and the provisions of the PCSSD, have been adequately addressed throughout the Draft EIR, including in Section 4.7, Greenhouse Gas Emissions, Section 4.10, Land Use and Planning, and Section 4.14, Transportation. The comment does not provide specific information or substantial evidence to demonstrate the Project's inconsistency with relevant plans.

The comment also claims that instead of providing mitigation measures for many significant impacts, the Project merely waives the mitigation by pretending that impacts do not exist. CEQA only requires mitigation measures if substantial evidence exists of potentially significant environmental impacts. In particular, CEQA Guidelines Section 15126.4(a)(4)(A) states that there must be an essential nexus between the mitigation and a legitimate government interest (i.e., potential significant impact). The Draft EIR fully complied with all of CEQA's mandates, and the comment presents no information or substantial evidence where significant impacts are claimed and no mitigation measures provided.

The comment also requests an extension of the 45-day public review of the Draft EIR by at least 120 days. The City has provided the following public review periods and opportunities for public input during the Shadowbox Studios EIR process:

- Publication and distribution of a Notice of Preparation (NOP) on March 28, 2022, notifying interested agencies, organizations, and persons that the City would be preparing an EIR for the Project and inviting comments on the scope and content of the EIR. The public review period for the NOP was from March 29, 2022, to April 28, 2022.
- Public scoping meeting held on April 21, 2022, at which the City accepted comments on the scope and content of the EIR.
- Publication and distribution of a Notice of Completion and a Notice of Availability of the Draft EIR on April 6, 2023, which notified interested agencies, organization, and persons

[38] According to the Protected Tree Report prepared for the Project (included in Appendix D of the Draft EIR), a rating of C indicates average condition; however, although healthy in overall appearance, there exists an abnormal amount of stress, pest infestation, or visual signs of minor structural problems. A rating of D indicates below average/poor condition; the tree is characterized by exhibiting a great degree of stress, pest, or diseases and appears to be in a rapid state of decline. The degree of decline can vary greatly and may include dieback or advanced stages of pests or diseases. There may also be visual signs of structural problems such as cavities, decay or damaged roots.

that the City was accepting comments on the Draft EIR. The public review period for the Draft EIR began on April 6, 2023, and ended on May 22, 2023.

- Three Planning Commission meetings held on April 18, 2023, May 16, 2023, and June 20, 2023, to solicit comments from the public and the Planning Commission on the Draft EIR.

The public review process undertaken by the City for the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. Given the above, and based on direction provided by the City's Planning Commission, the Draft EIR review period was not extended.

Response to Comment No. O9-2

The comment briefly describes the Project and the approvals being sought by the applicant and states that the Project will not comply with the circulation plan or traffic requirements until the Dockweiler Drive Extension Project is built. However, the Project is not dependent on the Dockweiler Drive Extension Project. The Project would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, to provide additional roadway capacity and accommodate existing and future traffic volumes with the addition of Project traffic regardless of the completion of the Dockweiler Drive Extension Project.

The comment also claims that the current plan under the approved zoning would avoid much of the Project's impacts and create a park area around Placerita Creek. Contrary to the comment's claim, as presented in Section 5.0, Alternatives, of the Draft EIR, although Alternative 2, which represents development consistent with the existing zoning of the Project Site, would result in lesser impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources, it would result in greater impacts related to air quality, energy, GHG emissions, hazards and hazardous materials (regarding wildfire), noise, population and housing, public services, transportation, utilities and service systems, and wildfire.

In addition, the comment asserts that the NOP listed many areas of concern and found the majority of them as potentially significant and that the opening summary of the Draft EIR listed many areas of controversy but that despite of this, the Draft EIR found that there were no significant impacts or mitigation measures needed. It should be noted that the areas of concern listed in the NOP were based on the Initial Study prepared for the Project. One of the purposes of an Initial Study is to assist in the preparation of an EIR by focusing the EIR on those effects that the Initial Study determined to be potentially significant. In addition, as described in the Executive Summary of the Draft EIR, potential areas of controversy may include those environmental issue areas where the potential for a significant unavoidable impact has been identified. However, as identified in the Draft EIR, after the analyses of those effects that the Initial Study determined to be potentially significant, all impacts associated with the Project would be less than significant or less than significant with mitigation incorporated.

The last part of the comment claims that the Draft EIR failed to inform the public and decision-makers of the environmental consequences of decisions before they are made. The Draft EIR fully complied with all of CEQA's mandates, and the comment presents no information or substantial evidence where significant impacts are claimed and no mitigation measures provided.

Response to Comment No. O9-3

The comment states that the 2012 General Plan update did not include a large industrial project on the Project Site but that the area is zoned for much-needed housing. As discussed in Response to Comment No. O9-1 above, the majority of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The Project is permitted in the MXN zone with approval of a Conditional Use Permit (CUP).

In addition, as explained in Section 4.10, Land Use and Planning, of the Draft EIR, under State Planning and Zoning law (Government Code Section 65000 et seq.), strict conformity with all aspects of a plan is not required. As discussed in the State of California General Plan Guidelines, a proposed project should be considered consistent with a general plan or elements of a general plan if, considering all its aspects, it will further the objectives and policies of the general plan and will not inhibit their attainment.

At a regional level, the Project Site is located within a SCAG-designated High Quality Transit Area (HQTA) and a Transit Priority Area (TPA), both of which are considered Priority Growth Areas within 0.5 mile of an existing or planned transit stop that encourage transit-oriented developments (TODs). SCAG defines TOD as a "planning strategy that explicitly links land-use and transportation by focusing mixed housing, employment, and commercial growth around bus and rail stations (usually within ½ mile). TODs can reduce the number and length of vehicle trips by encouraging more bicycle/pedestrian and transit use and can support transit investments by creating the density around station to boost ridership."[39]

Accordingly, the Draft EIR adequately analyzed the Project's consistency with applicable plans and policies, particularly the City's General Plan.

Response to Comment No. O9-4

The Transportation Assessment (Appendix L of the Draft EIR) analyzed the impacts of the Project both without and with the Dockweiler Drive Extension Project in place and identified interim improvements that would be necessary to allow the Project to open prior to the completion of the Dockweiler Drive Extension Project.

The Project Transportation Analysis was based on the Dockweiler Drive Extension EIR, and the future traffic volumes projected for the area are all based on the traffic model used to develop the analysis for the Dockweiler Drive Extension Project. The residential project previously proposed for the Project Site included in the Dockweiler analysis was removed from the model and replaced with the Shadowbox Project. Therefore, it is unclear what is meant by the comment, "Additionally, the Dockweiler Traffic analysis does not correlate with the Traffic Assessment on which this industrial project is based. Which study is correct?"

The Project analysis does correlate with the Dockweiler analysis, and both studies are correct. They approved Dockweiler Drive Extension EIR studied a separate project, which is the extension of Dockweiler Drive from its current terminus at Valle del Oro to Railroad Avenue, specifically the

[39] Southern California Association of Governments, Connect SoCal: The 2020-2045 Regional transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, adopted September 3, 2020, 176.

alignment for the Dockweiler Drive extension. The Dockweiler Drive Extension EIR analyzed multiple conceptual intersection designs; however, it did not provide specificity or commitment to a particular design for the roadway.

Appropriately, the Project's Transportation Assessment contains detailed operational evaluations of the intersection of 12th Street/Dockweiler Drive/Arch Street configured as a roundabout and as a traditional signalized, four-legged intersection in order to determine what, if any, roadway improvements would be necessitated by the Project. The analysis finds that the signalized intersection offers safety advantages for the existing residents under evacuation conditions.

Response to Comment No. O9-5

The comment cites Objective C 2.5 and Policy C 2.5.2 in the City's Circulation Plan and CEQA threshold 4.8(g) in the Draft EIR. The comment states that the Draft EIR's fire and evacuation analysis is deficient because it did not describe an evacuation plan for Project employees and adjacent existing residents or discuss how the evacuation of the Project would impede the evacuation of adjacent residents. The comment also claims that the Project is dependent on the modifications proposed by the Dockweiler Drive Extension Project and that it relies on instructions from local emergency management authorities instead of proposing an evacuation plan. Further, the comment asserts that wildfire is a significant impact that has not been adequately analyzed in the Draft EIR and that the impact would require mitigation because the Project is in a VHFHSZ and would add 3,000 employees.

As discussed in Response to Comment No. O8-25, the Draft EIR included an FPP that evaluated the Project's potential to ignite new fires and an extensive evacuation modeling analysis that accounted for Project employees and existing adjacent residents (see Appendix N of the Draft EIR). The FPP concluded that the Project would provide a defensible space and that the Project would not contribute to increased fire risk to the surrounding community. The evacuation analysis described a worst-case evacuation scenario where all evacuees would leave the Project area through the intersection of Railroad Avenue and 13th Street to the west. As concluded in the evacuation analysis, the Project would reduce the evacuation congestion period compared to existing conditions. Moreover, as explained in Response to Comment Nos. O8-25, O8-73, and O8-74, the Project does not rely on the completion of the Dockweiler Drive Extension Project. Further analysis of the Project's wildfire and evacuation-related impacts are also provided in Section 4.17, Wildfire, of the Draft EIR. As such, the Draft EIR describes an evacuation plan that included the Project employees, as well as adjacent residents, and adequately analyzes Project impacts related to wildfire and evacuation. Based on substantial evidence, the Draft EIR concluded that impacts would be less than significant.

Response to Comment No. O9-6

The comment identifies the Project Site to be located within the Newhall community portion of the City's Beautification Master Plan area and adjacent to the Old Town Newhall area. The comment claims that the Project, with building heights that exceed general plan limits and a huge wall that will face Railroad Avenue, will not enhance the area and may depreciate the value of the Old Town Newhall properties. However, the comment does not provide substantial evidence to support this claim. On the contrary, the first page of the Newhall Community Design Guidelines of the City's Beautification Master Plan describes the film industry as one of the strong roots that is still very important to the residents of Newhall. As described in Section 2.0, Project Description,

of the Draft EIR, the campus would feature various design elements that commemorate the filmmaking heritage of Santa Clarita, including a mural featuring film stars, such as Charlie Chaplin, Gene Autry, and William S. Hart, among others, from Santa Clarita Valley's past. In addition, the proposed buildings have been designed to be consistent with the Old Town Newhall Specific Plan standards, including its development standards and architectural style standards. As an example, the main street commercial architectural type, identified in the Old Town Newhall Specific Plan, would be used on the support building façade along Railroad Avenue to integrate with and maintain the community character of Old Town Newhall while also providing the necessary acoustical buffer from the railroad noise to the sound stages. The design of the Project's gateway and ancillary buildings conveys some characteristics of craftsman style architecture with low-pitched roofs and overhang that rest on decorative stone columns similar to those found at the Old Town Newhall Library buildings and the Jan Heidt Metrolink Station south of the Project Site.

Furthermore, landscaping for the gateway portal at the main entrance to the campus would extend from the Project's entrance driveway to segments of 13th Street, Arch Street, and 12th Street immediately adjacent to the Project Site's southern boundary. The proposed landscape plan would reflect the visual character of the neighborhood, including the provision of trees and other plant materials along the perimeter of the Project Site to provide screening and improve the streetscape of the immediate Project vicinity.

Response to Comment No. O9-7

The comment claims that the Draft EIR failed to discuss and mitigate impacts on Placerita Creek as related to scenic visual relief, groundwater recharge, and value as a wildlife corridor. As discussed in Section 4.1, Aesthetics, of the Draft EIR, the Project would not develop the entire Project Site and would preserve the majority of the ridgeline and Placerita Creek as open space. Further, the Project Site and the surrounding existing developed areas, such as the residential and commercial uses, collectively do not contain scenic features or prominent visual elements that would constitute an expansive, highly valued landscape that would provide the viewshed for a scenic vista.

Regarding groundwater recharge, as described on page 4.9-16 in Section 4.9, Hydrology and Water Quality, of the Draft EIR, the Project would incorporate an infiltration and drainage basin, multiple catch basins, and landscape designed to minimize or eliminate runoff. On-site runoff from the Project Site would be captured in a closed pipe system and conveyed to Placerita Creek, a soft-bottom drainage channel that allows for percolation of surface water. Moreover, prior to discharging into Placerita Creek, the first-flush runoff would be routed through the underground infiltration chambers or infiltration/drainage basin proposed for the Project. Additionally, a portion of the off-site stormwater, during peak storm events, would be routed to the infiltration/drainage basin. The Project's proposed drainage/infiltration system would capture the first ¾ inch of rainfall from each storm event and use infiltration chambers/basin to infiltrate this rainfall back into the earth. Given this proposed system, the Project would not substantially interfere with groundwater recharge.

Regarding major wildlife connection, the Project Site represents a relatively small amount of open space in the vicinity and the region based on review of aerial imagery. In addition, most of the Project Site consists of non-native grassland and is isolated and already fragmented from intact native habitats in the region and is surrounded by development that limits opportunities for wildlife movement, both locally and regionally. There are large tracts of open space to the north and east

of the Project Site, including the Quigley Canyon Open Space located approximately one mile to the east and the Angeles National Forest just east of SR-14, that are more suitable to serve as wildlife corridors. See also Response to Comment Nos. A1-6 and O6-17.

The comment also asserts that "Instead of preserving and enhancing the creek as proposed for the Alternative 2 housing project, no one will be able to even see the creek and its Northern floodplain turned into a parking lot," which the comment claims is not consistent with the Open Space Element or the PCSSD. Because the elevation of the creek is lower than the surrounding area, views of the creek from the public right-of-way are limited to the areas near the Railroad Avenue bridge over the creek. The analyses of the Project's consistency with the Open Space Element and the PCSSD are presented on pages 4.10-30 through 4.10-37 and page 4.10-40, respectively, in Section 4.10, Land Use and Planning, of the Draft EIR.

The comment also claims that the Project will impact the ridgeline north of Placerita Creek, which is not consistent with the Open Space and Conservation Element, and asserts that it is incorrect to state that the Project is consistent with this element when major impacts to the ridgeline will occur. As discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would not disturb the area beyond the base of the ridgeline north of Placerita Creek and would maintain the ridgeline as natural open space.

Lastly, the comment asserts that the response to "Threshold 4.1(a): Would the Project have a substantial adverse effect on a scenic vista" should be yes. However, as discussed under that threshold, the visuals referred to in the comment present foreground and middleground views that are not recognized as scenic vistas because the local public streets and neighboring developed areas do not provide a viewshed that offers a range of vision in which scenic resources may be observed. In addition, the Project Site and the surrounding existing developed areas, such as the residential and commercial uses, collectively do not contain scenic features or prominent visual elements that would constitute an expansive, highly valued landscape that would provide the viewshed for a scenic vista. Accordingly, the determination of a less-than-significant impact under Threshold 4.1(a) is correct.

Response to Comment No. O9-8

The comment asserts that the Project must include an expensive bridge over the railroad tracks because the PUC would not grant a permit for an at grade crossing and that the Project will have a significant impact unless and until the Dockweiler Extension is completed. However, the Project, which would implement off-site improvements, is not dependent on the completion of the Dockweiler Drive Extension Project. More, specifically, the Project would implement the following off-site improvements:

- Widening of the rail crossing at 13th Street and Railroad Avenue;
- Widening of 13th Street, Arch Street, and 12th Street;
- Complete signalized intersection at 13th Street and Arch Street; and
- Complete signalized intersection at 12th Street and Arch Street.

If the Dockweiler Drive Extension Project is not completed prior to the completion of Project construction, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of the Draft EIR.

The comment also claims that there is a potential for traffic stacking at the 13th Street entrance that may potentially back up across the railroad tracks. The inbound lanes to the Project provide more than 2,100 feet of queueing space, which is more than double the typical storage length for projects of this type and size. The entry gates for Gates 1 and 2 off the intersection of 13th Street and Arch Street have been set back well away from the public street intersection, and, as such, no queuing that would extend to the intersection or the railroad tracks is anticipated.

The comment states their concern that the PUC has not been advised of the Project. As identified in Section 2.0, Project Description, of the Draft EIR, the Project will be required to secure an authorization letter from the PUC for the modifications to the railroad crossing. Construction permits will not be issued by the City until required approvals/permits from all public agencies involved, including the PUC, are granted.

Response to Comment No. O9-9

The comment asserts that the Draft EIR failed to acknowledge or discuss the City's 2012 Climate Action Plan that requires returning to a baseline of 2006 emissions. It further states that wildfire should be addressed in the EIR with respect to GHG impacts. It states that the removal of the seven heritage oaks should be included in the GHG analysis as they sequester carbon dioxide, and that mitigation should be incorporated to reduce GHG emissions.

The 2012 Climate Action Plan had a horizon year of 2020. Since the Project would be completed post 2020, the Climate Action Plan is not relevant to the current project and, therefore, did not need to be addressed in the Draft EIR.

A discussion of the potential for wildfire to result from climate change is addressed in the Climate Change Impacts subsection of Section 4.7, Greenhouse Gas Emissions, under the discussions of both Air Quality (page 4.7-2 of the Draft EIR) and Ecosystems and Wildfire (page 4.7-3 of the Draft EIR). The Project itself is not a direct source of wildfires, and, therefore, the evaluation of the Project's contribution of wildfires is not warranted.

While the seven heritage oaks on-site do store some carbon dioxide, the removal of seven trees would not result in a noticeable increase of GHG emissions. Additionally, the Project proposes to plant 211 oak trees, 450 non-oak trees, and other landscaping, which would also result in GHG sequestration and, therefore, has the potential to offset any loss of carbon sequestration from the removal of the trees.

Mitigation measures are not required for impacts that are shown to be less than significant. As detailed in Response to Comment Nos. O5-14, O5-15, O5-40, and O5-41, the Project adequately addressed the Project design features that would be incorporated to reduce GHG emissions from the Project, and the Draft EIR demonstrated that, by consistency with the documented GHG reduction plans, the Project would result in less-than-significant impacts related to GHG emissions. Therefore, inclusion of mitigation is not necessary.

Response to Comment No. O9-10

The comment asserts that the Project will unavoidably significantly impact the light and glare and affect the night sky and create glare to adjacent residences in contradiction so part A.4 of the City lighting ordinance. Section 4.1, Aesthetics, of the Draft EIR, expresses that the Project Site currently contains no artificial lighting sources. However, it also identifies that the Project Site is surrounded by low-scale development with a variety of minor outdoor night lighting sources

located at single-family homes to the east and commercial and residential uses to the south and west. In addition, there are streetlights along Railroad Avenue to the west and 13th Street, Arch Street, and 12th Street to the south. Additional existing sources of artificial lighting include headlights from vehicle traffic along surrounding roads and accessing commercial and retail buildings to the south and west; railroad crossing lights at the at-grade intersection with 13th Street; traffic signals at Railroad Avenue and its intersections with both 13th Street and 15th Street; illuminated billboard signs along Railroad Avenue; and illuminated signage at commercial sites west and south of the Project Site.

Furthermore, a lighting plan was prepared for the Project, which demonstrated that no increase in foot candles would occur along the boundaries of the Project Site in compliance with SCMC Section 17.51.050, Outdoor Lighting Standards, which requires all lighting to be directed downward to prevent off-site glare and not visible from a public right-of-way and prohibits lighting to illuminate other properties. Accordingly, mitigation measures are not necessary. The comment presents no other information or substantial evidence that lighting will not be directed downward or that light trespass will not occur. The comment is noted for the record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. O9-11

The comment expresses opposition to the removal of the seven heritage oaks on-site. However, as discussed in Response to Comment No. O9-1, of the seven heritage oaks that would be removed, the condition of five was rated C- or D. The Project would replace the 13 oak trees to be removed trees with 211 oak trees, including coast live oak, Engelmann oak, valley oak, and southern live oak.

The comment states that if the City supports the removal of the oak trees, that the decision-makers support Alternative 3 and preserve additional oaks as well as a set back from the creek. As discussed on page 5.0-7 in Section 5.0, Alternatives, of the Draft EIR, because Alternative 3 would disturb the same footprint as the Project, the 13 oak trees proposed to be removed under the Project would also be removed under this alternative with the same number of replacement trees provided as the Project and the same set back from the creek as the Project.

The comment claims that the Draft EIR failed to discuss the impacts on the wildlife corridor as a result of improvements to Placerita Creek. Please refer to Response to Comment No. O9-7.

Response to Comment No. O9-12

The comment states that the Draft EIR concluded that the Project would have no noise impacts despite the fact that the Project would be constructed on vacant land that currently generates nominal noise levels. The comment argues that the Project will inevitably produce noise levels that would result in serious impacts, particularly due to increased traffic and other activities, which must be disclosed and mitigated in the Draft EIR. To support their argument, the comment cites the California Health and Safety Code 46000, which states that excessive noise is a hazard to public health and that the state of California has the responsibility to control and prevent such noise for the welfare of its citizens. The California Health and Safety Code 4600 text is noted for the administrative record. This code section is the genesis for noise ordinances and noise elements throughout the State; thus, these principles are inherent in the City's noise guidelines and standards. The comment concludes with the contention that the Draft EIR is deficient because it fails to disclose and mitigate potential noise impacts to the surrounding neighborhood.

The comment claims that the Draft EIR and the supporting Noise and Vibration Study in Appendix J of the Draft EIR determined that the Project would result in no noise impacts. However, the analysis presented in the Draft EIR found that impacts from construction and operational noise and construction vibration would be less than significant.

The comment also asserts that traffic noise and other noise activities were not disclosed. Traffic noise impacts were analyzed in detail on pages 4.11-17 through 4.11-22 in Section 4.11, Noise, of the Draft EIR. In addition, other sources such as mechanical equipment (HVAC and exhaust fans) and parking lot noise (arrival and departure of vehicles, limited vehicle idling, vehicle door closing, passenger conversations, and vehicle startup) were modeled as shown in Figure 4.11-3 and Table 4.11-3 and analyzed on pages 4.11-15 through 4.11-17 in Section 4.11, Noise, of the Draft EIR. As determined therein, noise impacts from these sources would be less than significant.

Response to Comment No. O9-13

The comment states that the conclusion that most of the potential impacts of the Project do not require mitigation is baffling. The Draft EIR fully complied with all of CEQA's mandates and determined that no significant unavoidable impacts would result from Project implementation. CEQA only requires mitigation measures if substantial evidence exists of potentially significant environmental impacts. In particular, CEQA Guidelines Section 15126.4(a)(4)(A) states that there must be an essential nexus between the mitigation and a potential significant impact of a project.

The comment states preference and support of Alternative 2. As presented in Section 5.0, Alternatives, of the Draft EIR, although Alternative 2, which represents development consistent with the existing zoning of the Project Site, would result in lesser impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources, it would result in greater impacts related to air quality, energy, GHG emissions, hazards and hazardous materials (regarding wildfire), noise, population and housing, public services, transportation, utilities and service systems, and wildfire.

The comment also states that if the City must have this project that Alternative 3 is preferred. However, as discussed on page 5.0-7 in Section 5.0, Alternatives, of the Draft EIR, because Alternative 3 would disturb the same footprint as the Project, the 13 oak trees proposed to be removed under the Project would also be removed under this alternative with the same number of replacement trees provided as the Project and the same set back from the creek as the Project.

All comments have been noted for the administrative record and forwarded to the decision-makers for consideration.

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LETTER P1

From: Greg Hargrove <gngofscv@gmail.com>
Sent: Monday, April 24, 2023 12:22 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Re: Shadowbox studio project, Master Case 21-109

Erica,

I believe the draft EIR does not adequately address the potential delays to evacuation that could occur due to wildfire or earthquake. Based on the Transportation Assessments in Appendix L of the draft EIR, there are unacceptable delays during evacuation under all studied scenarios. Given these realities, I think the project should not be approved unless Shadowbox can negotiate a north end emergency exit route using the MWD right of way to connect with Via Princessa. **P1-1**

Thank you for your consideration of this request.

Sincerely,

Greg Hargrove
24749 Aden Ave.

818-416-7203

Letter No. P1
Greg Hargrove
Newhall, CA 91321

Response to Comment No. P1-1

The comment claims that the Draft EIR did not adequately the potential delays to evacuation that could occur due to wildfire or earthquake and that the delays during evacuation under all scenarios studied in the Transportation Assessment were unacceptable. The comment states that the Project should not be approved unless a north end emergency exit route using the MWD right-of-way to connect with Via Princessa can be negotiated.

As discussed in Response to Comment No. O8-22, the Project's Transportation Assessment contains an evacuation analysis that compared the existing evacuation conditions and evacuation conditions with the Project both without and with the roundabout and without and with the Dockweiler Drive Extension Project. In all scenarios, the evacuation times would improve with the Project due to the off-site improvements that would be implemented by the Project, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street. Based on the results of the Transportation Assessment, the Draft EIR concluded that Project impacts related to evacuation would be less than significant without mitigation. As such, requiring the Project to negotiate a new emergency exit route using the MWD right-of-way is not warranted. This comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

LETTER P2

From: John Fossa <johnfossa11@gmail.com>
Sent: Monday, May 22, 2023 3:22 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: letter opposing proposed Shadowbox project

Good Afternoon,

Please accept the attached comments in your review of the proposed Shadowbox studio campus project.

Thank you,
John Fossa
22136 Placeritos Blvd.

letter opposing proposed Shadowbox project

LETTER P2 Continued

TO: City of Santa Clarita Planning Commission
FROM:
John Fossa
SUBJECT:
Proposed Shadowbox Project Items of Concern
DATE:
MaY 22, 2023

I am writing to urge you to examine specific community concerns before making any decision on the Shadowbox Studio Project. My name is John Fossa. I'm a resident of Placerita Canyon and a member of the PCPOA Board. P2-1

Our community's overarching concern is that we are a Special Standards District, established to preserve and maintain our rural equestrian lifestyle, and this project does not fit with those standards. The size and scale of the project as proposed are monumental - building height, footprint, lighting, changes to waterflow, road configurations, traffic, and so forth. Every request for a zone change or overriding consideration is an attempt to circumvent a standard or a regulation of some kind that is in place for some good and specific reason. The long list of exceptions this project asks should be a cause for concern. Exceptions and excusals compound. P2-2

My main issue with this proposal as a resident is in regard to traffic and safety. We are a community of about 450 homes. Appendix K of the DEIR mentions that the daily population of the Shadowbox project as proposed will be 5,800 employees, yet the report says "no impact" on the canyon in regard to traffic. This is inconceivable. When PCPOA met with Shadowbox's traffic consultant in March we were shown simulations and numbers based on car counting that was done 5 years ago. Those are irrelevant now. If those are the same numbers you were shown, is it possible to study a more realistic assessment of what the actual traffic impact will be? P2-3

The other points I'd ask the commission to look at all coalesce around the fact that the only access/egress point for this proposed project is at that one corner of the site - 3 gates on paper, but one point in reality in that all the gates empty at the same choke point on Arch and 13th Streets. We know that this design is unlike any other project of its kind in Southern California in terms of the ratio of gates to acres or gates to daily population. P2-4

If a private rail crossing into and out of this development were added at 15th Street, or a private gate connecting to Circle J Ranch, this would alleviate so much daily congestion on Arch and 13th. Moreover, it would provide a second exit point in case an emergency evacuation were necessary. Even if a second gate were reserved for trucks only, removing that truck traffic from the 13th and Arch configuration would make that a safer crossing. Shadowbox representatives told the PCPOA board that adding another gate would be expensive and time consuming - not that it's not a good idea. The reality is, a lack of safety is always more costly than safety in the long run. Again, with the compounding impact of the special considerations Shadowbox is asking for, it's especially important for the Commission to plan for safety in this case. P2-4 Continued

Pedestrian and auto safety at the proposed traffic lights where the Dockweiler secondary highway will meet Arch Street and Placeritos Blvd. is a concern. Experts know that timed lights may be good for traffic flow but not definitely for traffic safety. The research on this is very clear. Replacing lights or signs with roundabouts results in 80% fewer accidents, and accidents that do occur tend to be less serious due to lower vehicle speeds. Is it possible to keep the roundabout design that the City and PCPOA developed collaboratively when the Dockweiler extension was designed? Empirically, studies of driver behavior show that we are less safe with series of timed lights. Drivers speed up and run yellow and red lights when they did not catch a green earlier in the series. Anecdotally, I will never forget the teenager I saw flipped up and onto the hood and windshield of the car that hit him on Lyons Ave. several years ago in this exact same scenario - a driver trying to beat the second light and a pedestrian who trusted the walk signal. P2-5

It seems that the argument against the roundabout is studio truck traffic - that the trucks can't handle it. If truck traffic were diverted to an alternate gate, such as at 15th Street, we could have a safe configuration at Arch and 13th. P2-6

Emergency evacuation is a major concern. The Dockweiler extension does not yet exist. Fire in Placerita Canyon is not a question of if - it's a when and from which direction. Wildfire can travel 40 miles an hour. 6,000 cars coming across the 13th street crossing cannot. A fire moving into the canyon from Sierra Highway would be catastrophic. Even when Dockweiler is completed, this scenario would force all evacuating traffic into that same bottleneck at the 13th Street crossing. To be fair, these were the same arguments city staff and Master's University used against Placerita Canyon residents when we were forced to accept the Dockweiler extension: "A development like Placerita Canyon with only one point of egress would never be approved in today's world. A wildfire moving west through Placerita Canyon would be catastrophic. Lives of Master's students and staff are at risk." If these considerations are important - and of course they are - they should be applied consistently from project to project. P2-7

I'm reminded of analyses of airplane crashes where you hear that a string of things has to go wrong for the plane to actually crash. That's what worries me with this project. We'll have human error all day long; I get that. But compound that by sidestepping regulations and standards, and add pressure by pushing riskier shortcuts despite the availability of safer options – then all it takes is a fire to shut down Sierra Highway as meanwhile a truck driver misjudges the severe 90 degree turn at Arch and 13th, or someone tries to beat the light, or a train pauses at the crossing as they regularly do, and we have a massive disaster. P2-8

I believe that your commission's analysis of the details of this proposed project is our one safeguard. The economic benefits of this project have never been in question, but the details need to be looked at carefully. I believe it's possible for Shadowbox to have a profitable operation on this property while achieving the city's economic goals and the preservation of Placerita Canyon's designated status as a rural Special Standards District. At the very least, please consider Alternative #3 as a way to mitigate the negative impacts of this proposed project. P2-9

Thank you so much for the work you do and your attention to this proposal. I look forward to the rest of this process with you.

Sincerely,

John Fossa
221367 Placeritos Blvd, Newhall
661-373-8600

Letter No. P2
John Fossa
Newhall, CA 91321

Response to Comment No. P2-1

This introductory comment states the name of the commenter and their affiliation with Placerita Canyon and the PCPOA. The comment does not address the adequacy of the Draft EIR. Accordingly, the comment is noted, and no additional response is warranted.

Response to Comment No. P2-2

The comment asserts that the Project's building height, footprint, lighting, changes to waterflow, road configurations, traffic, etc. do not fit with the standards of the Placerita Canyon Special Standards District (PCSSD). The comment also states that the Project's requested zone change or overriding consideration is an attempt to circumvent a standard or regulation and that the Project's long list of exceptions is a cause for concern. It should be noted that a large portion of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The Project is permitted in the MXN zone with approval of a Conditional Use Permit (CUP). The zone change request for the northern portion of the Project Site from NU5 to MXN would have no impact on the Project's requirement to comply with the applicable development standards of the PCSSD.

As discussed in Section 4.10, Land Use and Planning, of the Draft EIR, the Project would implement the following components in accordance with the provisions of the PCSSD:

- The Project would be internally and externally pedestrian-oriented with bicycle amenities and accommodations. The Project would construct a Class I trail along the Project frontage at 12th Street, Arch Street, and 13th Street and would be conditioned to either (1) pay an in-lieu fee to contribute toward improvements or (2) construct a connection to a future Class I trail along Railroad Avenue and future connection to the Jan Heidt Newhall Metrolink Station and various retail, commercial, and entertainment uses in Old Town Newhall to promote a pedestrian friendly environment.
- The Project would include a defined entry gateway with landscaping and architectural elements with signage.
- The Project would utilize the MWD right-of-way behind the residences that front on Alderbrook Drive as a plant nursery, which would provide a transition between the residential uses immediately east of the Project Site and the Project.
- The majority of the Project's landscaping would use drought-tolerant trees.
- The proposed buildings would provide 360-degree architectural design with pedestrian-scaled building massing and forms.
- The Project would develop buildings with varied heights, ranging from 18 feet for the catering buildings to 55 feet for the sound stages, as permitted upon extension of the boundaries of the Jobs Creation Overlay Zone to incorporate the entire Project Site.

Furthermore, the Project would be required to undergo several City processes prior to Project approval, including architectural design review, development review, landscape plan review, and

hillside review, to ensure that the Project complies with the requirements of the PCSSD and is compatible with the surrounding area, particularly the residential uses immediately east of the Project Site in Placerita Canyon.

Response to Comment No. P2-3

The comment expresses concern over traffic created by the estimated daily population on the Project Site and the safety issues that may result. The comment incorrectly states that the Draft EIR concluded that there would be no impact due to traffic. Pursuant to Senate Bill 743, the primary metric to evaluate transportation is now vehicle miles traveled (VMT), as referenced in Appendix G of the CEQA Guidelines, and not the effect of traffic growth on street level of service. In accordance with Appendix G of the CEQA Guidelines and the City's Initial Study Checklist, the Draft EIR evaluated impacts related to transportation utilizing the thresholds listed on pages 4.14-8 and 4.14-9 of the Draft EIR, and impacts were concluded to be less than significant for each threshold in compliance with the requirements of CEQA and the CEQA Guidelines.

The comment also asserts that the Project's Transportation Assessment is based on vehicle counts from five years ago, which are now irrelevant. New intersection traffic counts were not performed because the Transportation Assessment was conducted in the middle of the COVID pandemic, and data collection was not possible as traffic volumes would not have reflected pre-pandemic conditions. Traffic counts have been conducted for other development projects in the City in Year 2023, and the results of these traffic counts indicate that current traffic volumes in Santa Clarita have yet to rise to pre-pandemic levels. Using pre-pandemic traffic counts and still applying a yearly growth factor through the pandemic years results in much higher traffic volumes for Existing Conditions than would occur if new counts were taken in 2022 or 2023. Accordingly, contrary to the comment's assertion, the traffic counts used in the Project's Transportation Assessment are more conservative and valid and do not need to be updated.

Response to Comment No. P2-4

The comment states that although the plans show three gates, there is in actuality only one access/egress point for the Project and that all gates empty at the same choke point on Arch Street and 13th Street. The comment claims that this design is unlike any other project of its kind in Southern California in terms of the ratio of gates to acres or gates to daily population.

The Project's evacuation analysis (see Appendix N of the Draft EIR) assumed that all vehicles would exit from 13th Street to Railroad Avenue during an evacuation event and concludes that the Project would improve evacuation times compared to existing conditions due to the off-site improvements that would be implemented by the Project. The commenter's claim that the Project's design is unlike any other project of its kind in Southern California in terms of the ratio of gates to acres or gates to daily population is not related to the adequacy of the Draft EIR.

The comment also provides suggestions for alleviating the daily congestion on Arch Street and 13th Street by providing a second exit point in the northern portion of the Project Site near 15th Street or a private gate connecting to Circle J Ranch in case of an emergency evacuation. As discussed in the public meeting before the Planning Commission on May 16, 2023, an additional access point to the Project Site along Railroad Avenue near 15th Street was considered. An evaluation of this location showed that the railroad tracks were too close to Railroad Avenue to permit the construction of a grade-separated rail crossing.

The California Public Utilities Commission (CPUC) is not amenable to creating any additional at-grade crossings of active rail lines, especially lines carrying trains moving at the speeds of the Metrolink service in the corridor. If an at-grade crossing was considered, CPUC typically requires that two existing at-grade crossings be closed in exchange for one new at-grade crossing.

Nevertheless, the Transportation Assessment in the Draft EIR evaluated the access points to the Project and found that the Project driveways and adjacent intersections would operate at acceptable LOS, meeting City of Santa Clarita thresholds. Thus, the creation of a new exit point is not warranted. The comment's suggestions are noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. P2-5

The comment expresses concern over the proposed traffic light at the future intersection of Dockweiler Drive, Placerita Canyon Road, and Arch Street and requests that the City keep the roundabout design.

The Transportation Assessment prepared for the Project evaluated in detail both the roundabout and the signalized intersection designs and concluded that, under evacuation conditions, the 1-lane roundabout design would have less capacity for evacuation operations than a signal and would have geometric constraints that do not accommodate horse trailers as easily, which is a concern raised by the community. Accordingly, a signalized intersection design would provide for the most efficient traffic operations under an evacuation scenario when compared with the roundabout or existing conditions.

Response to Comment No. P2-6

The comment states that the argument against the roundabout is due to the Project's truck traffic. It should be noted that Gate 3 at the southeastern corner of the Project Site along 12th Street would provide Project-related egress-only and be restricted to a right-turn movement onto 12th Street. In addition, Gate 2, which is located immediately east of the main entrance at 13th Street and Arch Street, would be access-controlled (unmanned). Accordingly, the Project's truck traffic would primarily access the Project Site through Gate 1 and would not need to pass through the intersection of 12th Street and Arch Street. Since the community has expressed concerns regarding the evacuation of horses and livestock, the traffic signal design would accommodate horse trailers easily when compared to the roundabout, which would be one lane, have less capacity for evacuation operation, and have geometric constraints.

Response to Comment No. P2-7

The comment states that emergency evacuation is a major concern during a wildfire event and that the Project would force all evacuating traffic into the same bottleneck at the 13th Street crossing since the Dockweiler Drive Extension Project does not yet exist. It should be noted that the Project, which would implement off-site improvements, is not dependent on the completion of the Dockweiler Drive Extension Project. More specifically, the Project would implement the following off-site improvements, regardless of the timing of the Dockweiler Drive Extension Project:

- Widening of the rail crossing at 13th Street and Railroad Avenue;
- Widening of 13th Street, Arch Street, and 12th Street;

- Complete signalized intersection at 13th Street and Arch Street;
- Complete signalized intersection at 12th Street and Arch Street;

If the Dockweiler Drive Extension Project is not completed prior to the completion of Project construction, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of the Draft EIR.

The comment related to Master's University does not relate to the Project's impacts or address the adequacy of the Draft EIR. However, the comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. P2-8

The commenter express concern by describing hypothetical situations that cause major disasters. The comment asserts that human error compounded by sidestepping regulations and standard and added pressure by pushing riskier shortcuts despite the availability of safer options would result in a massive disaster. The Project would be required to demonstrate compliance with all applicable State, regional, and local regulations prior to issuance of a building permit and a Certificate of Occupancy and, as such, would not sidestep any regulations and standards.

Response to Comment No. P2-9

The comment acknowledges the potential benefit of the Project and requests the consideration of Alternative 3 as a way to mitigate the impacts of the Project. As described on page 5.0-7 in Section 5.0, Alternatives, of the Draft EIR, although Alternative 3 would reduce the development's square footage, it would require the same amount of grading as the Project, construct a bridge over Placerita Creek and provide the same bank stabilization as the Project, and disturb the same footprint as the Project. Accordingly, Alternative 3 would have the same impact related to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, tribal cultural resources, and wildfire. The comment does not address the adequacy of the Draft EIR. However, the comment's request is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

LETTER P3

Subject: Concerns Regarding the Proposed Shadowbox Studios Project, MC21-109, Comments to the DEIR

Dear Santa Clarita Planning Commissioners,

Writing on my own behalf and not on behalf of any other individual or organization, I am bringing to your attention a number of significant concerns that have been raised by various members of our community regarding the Shadowbox Studios project as it is proposed. As responsible stewards of our city's development and growth, I believe it is crucial that these concerns be addressed and carefully considered during the decision-making process and prior to approval.

As background, my family has been connected to the entertainment industry for the past 40+ years. My husband started in the mailroom of the Screen Actors Guild in 1979, eventually moving into union management. He moved to the producers' side in 1996/97 spending years in Labor Relations as a negotiator at Paramount Pictures, then CBS Studios after the Viacom split. He retired in 2016 as Vice President, Labor Relations. Several of our children work in the entertainment industry in crew positions and members of their respective Locals, which was a long, difficult, and expensive process to establish union membership. **P3-1**

That said, I understand the value the industry brings to the livelihood of those it employs. As a 32-year resident of Santa Clarita (Newhall) with residency over the past 10 years in Placerita Canyon specifically, I also understand how our City values the essence, environment, and existence of our community and the fact that we do not share many of the characteristics and challenges of the City of Los Angeles and surrounding areas or the San Fernando Valley. Good planning is just one aspect of achieving that distinction.

Before approving this project – and it is clear after the second public hearing that is the direction the Planning Commissioners will take – I ask that you thoughtfully consider some of the known challenges of the project, consider mitigations as conditions of approval to lessen the impacts of a large-scale studio rental facility on the existing communities, and balance the needs of the applicant with the needs of Placerita Canyon so that the burden of this project does not fall squarely on residents. Please make this something we can all live with and be proud to have in our city. As proposed, the project is not there yet, in my opinion.

As a starting point, I ask the Planning Commission to consider adoption of the Environmentally Superior Alternative #3 with modifications. **P3-2**

Additional Ingress and Egress:

There is a need for clarification on the absence of discussion regarding an additional ingress and egress to the Shadowbox Studios campus. What factors were taken into account in the Draft Environmental Impact Report (DEIR) to determine that no further access points were required? Was the traffic impact analysis conducted thorough enough to assess all potential effects on surrounding roadways? Were there flaws in the analysis that led to misrepresentations of actual impacts? How will traffic congestion be managed, especially during peak hours and when trains pass? Has city staff properly evaluated the information submitted from resident Del Nelson with the METROLINK / Southern California Regional Rail Authority (SCRRA) regarding the feasibility of a private crossing at 15th Street? Of note, a private crossing at this location would not only alleviate some of the traffic from the Arch and 13th Street intersection, but would also allow Los Angeles County Fire Department direct access to the studio campus from their Railroad Avenue and 15th Street station. There is also the possibility as one speaker mentioned at the May 16, 2023, public hearing for a gate from Circle J to the auxiliary north parking lot, which would also alleviate some of the vehicular traffic from the Arch and 13th Street choke point. Many Circle J residents spoke in favor of the project, so support seems to be built in.

Will at least one additional ingress/egress gate that does not feed into Placerita Canyon be required as a condition of approval?

P3-3

Transportation Infrastructure:

It is important to understand how an additional ingress and egress aligns with the overall transportation infrastructure plan for the Santa Clarita area. Will they complement existing traffic patterns and roadways, or will they necessitate significant modifications to the surrounding transportation network? What measures will be taken to minimize traffic congestion and ensure the safety of both studio personnel and the general public? If for some reason other ingress/egress access gates are not required as a condition of approval, how will synchronization of lights and the railroad occur? I have known Ian Pari, City Traffic Engineer, for many years and respect his work. Yet, when he mentioned at the May 16, 2023, public hearing that the traffic pattern at Reuther Avenue and Soledad was a model of what works well at a rail crossing, I was aghast. The light sequencing does not work well and I cannot imagine the overwhelming gridlock if that same pattern occurs on 13th Street at Railroad Avenue.

What measures will the City put into place to ensure that traffic flow at the railroad crossing remains fluid? Are there conditions of approval planning commissioners may add to regulate acceptable levels of service?

P3-4

Dockweiler Drive Extension Completion:

One critical aspect that requires careful consideration is the completion of the Dockweiler Drive Extension – both segments -- prior to the start of the studio construction, if approved. Given the projected increase in traffic associated with the construction of Dockweiler, the 13th Street Rail Improvement, and the studio campus, it is imperative that sufficient access points and roadways be in place to accommodate this influx of vehicles and heavy equipment. When last approved in 2018, the Dockweiler Drive Extension was identified as a vital component in mitigating potential traffic congestion and ensuring the efficient flow of vehicles in the area. By making the completion of the Dockweiler Drive extension a condition of approval, the Planning Commission can demonstrate its commitment to proactive planning, sustainable development, and the well-being of the community. This step will ensure that appropriate measures are taken to address transportation concerns and mitigate any adverse effects on the surrounding neighborhoods. P3-5

Will the Planning Commission require the completion of the Dockweiler Drive Extension – both segments – prior to the commencement of studio construction as a condition of approval?

Roundabout vs. Signalized Lights:

With the approval of the Dockweiler Drive Extension in 2018, city staff collaboratively worked with residents to design the intersection at 12 Street/Dockweiler Drive/Arch Street and the Placerita Canyon Road/Dockweiler connection. Through community surveys, meetings with staff, and the proverbial blood, sweat, and tears, it was determined that a roundabout was the preferred intersection design at 12 Street/Dockweiler Drive/Arch Street and a signalized T-intersection at the Placerita Canyon Road/Dockweiler connection. In early talks with the applicant, he was on board for the city-approved design. Without notice to residents, a change was proposed at the April 2022 Notice of Preparation Scoping Meeting when the roundabout was removed and signalized lights were proposed. Also, an unexpected grouping of signalized lights at the intersection of 13th Street and Arch Street appeared in the plans. P3-6

If the roundabout does not work for the studio project, as proposed, will the Planning Commission request city staff, the consultant, and the applicant to determine what size and scale of the project would work for the studio and the roundabout to coexist as a condition of approval?

Rail Safety and Quiet Zone:

When the project was first presented, the applicant mentioned he had submitted an application to the California Public Utilities Commission (CPUC) to apply for a quiet zone surrounding his property. Is there a status update on that request? As you are likely aware, train horns serve as vital warning mechanisms to alert pedestrians, cyclists, and motorists of approaching trains. The blaring sound of a train horn serves as an audible signal that can help prevent accidents and save lives. By eliminating the use of train horns in a quiet zone, we risk compromising the safety of individuals who rely on these audible cues in addition to crossing gates to navigate safely across railroad tracks. While the idea of reducing noise levels as it relates to film production may seem appealing, it is essential to consider the potential extreme dangers associated should a quiet zone be implemented. **P3-7**

Will the Planning Commission ensure that no quiet zone ever be implemented at the 13th Street rail crossing as a condition of approval?

Emergency Response and Evacuation Routes:

The potential impact of traffic delays and increased travel times for emergency response vehicles, especially in the event of a railroad emergency, is a critical concern. How will emergency services be ensured and what measures will be in place to minimize any adverse effects on response times and public safety? This is particularly relevant in the case of any train failure or stoppage at the 13th Street rail crossing prior to the Dockweiler Drive extension completion. **P3-8**

What measures will the Planning Commission put in place to minimize any adverse effects on emergency response times and public safety as a condition of approval?

Potential Impacts on Placerita Canyon:

The impact of increased traffic from the Shadowbox Studios project on every day travel and the evacuation routes for Placerita Canyon residents during emergencies is a matter of great concern. The potential risks to the safety of residents, as well as their horses, livestock, and pets, need to be thoroughly assessed and addressed to ensure their well-being and timely evacuation in case of emergencies like wildfires or flooding. Note that the back gate on the east side of the canyon does NOT automatically open during times of crisis. Not all residents have access to or the ability to afford a key card. There is absolutely no egress out of the gate for residents without a working key card. **P3-9**

Will the Planning Commission require the applicant to formalize an evacuation plan for studio personnel that does not add to evacuation traffic at the 13th Street/Arch Street intersection or have vehicles inadvertently travel the private road of Placerita

Canyon Road where they would not have the ability to exit? Depending on the nature of the emergency and the direction in the case of wildfires, will the Planning Commission require alternate routes as a condition of approval?

P3-9
Continued

Land Use Compatibility:

The lack of consideration for the potential of incompatible land use in the Draft Environmental Impact Report (EIR) is disconcerting. The example of the Santa Clarita Soccer Center, which was eventually forced to relocate due to noise complaints from nearby residents, highlights the importance of conducting thorough land use and planning studies. It is crucial to avoid situations where new developments disrupt or displace existing businesses and activities that contribute to our community's character and quality of life. As a reminder, Placerita Canyon shares its roads with tractors, horses, livestock, golf carts, cyclists, and pedestrians on a consistent basis.

Will the Planning Commission require city staff and Michael Baker International as the consultants to go back and thoroughly study land use as a condition of approval?

P3-10

Project Viability and Future Implications:

Given the current and future studio inventory under construction throughout Los Angeles, it is pertinent to evaluate the viability of the Shadowbox Studios project. What will happen if some or most of the sound stages are not rented once the project is completed? We need assurances that the project will not have a negative impact on our community if it does not operate as initially envisioned.

Will provisions be placed by the Planning Commission on acceptable usage of the studio property?

P3-11

Metropolitan Water District (MWD) Approval:

The status of the applicant's request to the MWD for various aspects of the project, such as north parking, emergency access route, secondary access to the north parking lot, and property use for a nursery, must be thoroughly examined.

Will the Planning Commission consider the MWD's approval as a condition for the project's approval? What alternative plans are in place if the MWD does not grant the requested approvals?

P3-12

Cultural Center Proposal:

The potential allocation of a portion of the Shadowbox Studios property for a cultural center has been suggested. What progress has been made in exploring this proposal? Has there been community input and engagement regarding this idea? A cultural center can bring significant benefits to the community, fostering arts, education, and community engagement. It is crucial to consider the feasibility, objectives, and potential partnerships for such a center. Also, will money be set aside by the applicant for the continued preservation of Placerita Canyon?

Will the Planning Commission consider requesting the applicant to bequeath property for public use adjacent to the project site and/or contribute financially to the Placerita Canyon Property Owners Association for furtherance of their mission to preserve and protect the rural equestrian lifestyle of the canyon?

P3-13

In conclusion, I strongly urge the Santa Clarita Planning Commission to carefully consider and address the concerns raised in this letter. Our community's growth and development must be balanced with the preservation of our unique character, the well-being of our residents, and the integrity of existing businesses and activities.

I request that staff respond to all the questions and concerns interested parties have raised and that the Planning Commission conduct an all-inclusive discussion of the proposed Shadowbox Studios project, considering all the aforementioned concerns and any other pertinent factors at the scheduled June 20, 2023, Planning Commission meeting. It is only through such a thorough assessment and a commitment to transparent decision-making that we can ensure the best outcomes for our community.

Thank you for your time, attention, and commitment to serving our community's best interests. I trust that you will carefully consider the points raised in this letter, and all letters and reports received, and take appropriate action to address the concerns stated.

P3-14

Sincerely,

M. Teresa Todd
24760 Oakcreek Avenue
Newhall, CA 91321
ttodd@povpr.com | 661.510.1908 (m)

Letter No. P3
Mamie Teresa Todd
Newhall, CA 91321

Response to Comment No. P3-1

The comment provides an introduction and background of the commenter and brings to the Planning Commissioners' attention a number of significant concerns raised by members of the community regarding the Project. The comment asks that the Commission consider some of the known challenges of the Project, consider mitigation measures as conditions of approval to less the impacts of the Project on the existing communities, and balance the needs of the applicant with the needs of Placerita Canyon residents. The comment does not raise specific issues related to the Draft EIR. However, the comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. P3-2

The comment asks that the Planning Commission consider the adoption of Alternative 3 with modifications. The comment does not raise specific issues related to the Draft EIR. However, the comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response to Comment No. P3-3

The comment claims that the discussion regarding an additional ingress and egress to the Shadowbox Studios campus is absent and proceeds to ask a number of questions related to the traffic impact analysis presented in the Draft EIR, including whether at least one additional ingress/egress gate that does not feed into Placerita Canyon be required as a condition of approval.

As discussed in the public meeting before the Planning Commission on May 16, 2023, an additional access point to the Project Site along Railroad Avenue near 15th Street was considered. An evaluation of this location showed that the railroad tracks were too close to Railroad Avenue to permit the construction of a grade-separated rail crossing. The California Public Utilities Commission (CPUC) is not amenable to creating any additional at-grade crossings of active rail lines, especially lines carrying trains moving at the speeds of the Metrolink service in the corridor. If an at-grade crossing was considered, CPUC typically requires that two existing at-grade crossings be closed in exchange for one new at-grade crossing.

The Transportation Assessment in the Draft EIR evaluated the access points to the Project and found that the proposed Project driveways and adjacent intersections would operate at acceptable Levels of Service (LOS), meeting City of Santa Clarita thresholds. City review of the transportation analysis showed that the analysis was thorough and sufficient to satisfactorily evaluate the effects of the Project traffic on the surrounding roadway network.

Neither City staff nor the transportation consultants preparing the Draft EIR are familiar with the concept of a "private rail crossing" that would not have to meet all the safety and design criteria of a public crossing and, therefore, meet the same CPUC criteria discussed above.

The Project does not own the land connecting the north auxiliary parking lot and the Circle J Ranch.

Response to Comment No. P3-4

The comment asserts that it is important to understand how an additional ingress and egress aligns with the overall transportation infrastructure plan for the Santa Clarita area and proceeds to ask a number of questions regarding the Project's impacts to existing traffic patterns and roadway and traffic congestion and what measures the City will put in place to ensure that traffic flow at the railroad crossing remains fluid and if there are conditions of approval planning commissioners may add to regulate acceptable levels of service.

The traffic flows along the roadways serving the Project Site have been evaluated in the Transportation Assessment in the Draft EIR. The study intersections have been evaluated using an LOS methodology consistent with all proposed development projects in the City of Santa Clarita.

Because of the concerns regarding closely spaced intersections, a SYNCHRO simulation model was prepared to evaluate the traffic flow along the 13th Street, 12th Street and Dockweiler Drive/Arch Street corridors. The simulation, presented at the Planning Commission public hearing on May 16, 2023, showed that coordinated traffic flow through these corridors could be accomplished through traffic signal system interconnection. The simulation and the Level of Service analyses were reviewed by the City's traffic signal management staff, who agreed that the proposed roadway and traffic signal system improvements would provide a better Level of Service after Project completion than exists today without the Project.

Response to Comment No. P3-5

This comment calls for the completion of the Dockweiler Drive Extension Project prior to the commencement of studio production as a condition of approval. The Project is not dependent on the completion of the Dockweiler Drive Extension Project. The Project would implement off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, providing additional roadway capacity and more efficient traffic operations under an evacuation scenario when compared to existing conditions. Accordingly, the Project could precede the Dockweiler Drive Extension Project by improving the Dockweiler Corridor, which comprises 12th Street, Arch Street, 13th Street, and Railroad Avenue, to provide a roadway system that would operate at acceptable LOS for both the Project and the neighborhood traffic.

The Transportation Assessment (Appendix L of the Draft EIR) studied every potential roadway network configuration for the area that could exist post-project. The Transportation Assessment analyzed traffic conditions without and with the Dockweiler Drive Extension Project, without and with the 13th Street crossing improvements, and without and with the roundabout at the intersection of Arch Street and 12th Street. The Transportation Assessment identified operational effects and potential solutions for every scenario that results in satisfactory intersection operations at all study intersections.

In addition, the Staff Report to the Planning Commission has recommended a set of roadway improvements prior to the completion of the Dockweiler Extension that are consistent with the findings of the Draft EIR. With these improvements, Table 18 on the Transportation Assessment (Appendix L of the Draft EIR) shows that the Shadowbox Project can be safely implemented prior to the completion of the Dockweiler Drive Extension Project without negative effects on the area roadway system.

Response to Comment No. P3-6

The comment claims that, through community surveys and meetings with City staff, it was determined that a roundabout was the preferred intersection design at 12th Street, Dockweiler Drive and Arch Street and a signalized T-intersection at the Placerita Canyon Road and Dockweiler extension connection. The comment questions whether the Planning Commission will request that City staff and the applicant determine the size and scale of the Project that would work for the studio and the roundabout to coexist as a condition of approval if the roundabout does not work for the Project.

The Transportation Assessment (Appendix L in the Draft EIR) evaluated the intersection of 12th Street/Arch Street/Dockweiler Drive as both a roundabout and a traffic signal. The analysis showed that both designs worked from an LOS standpoint, with the signalized intersection design resulting in some operational advantages. The analysis also showed that the roundabout would have some serious capacity constraints during an evacuation condition.

Response to Comment No. P3-7

The comment asserts that when the Project was first presented to the community, the applicant mentioned that an application to the CPUC was submitted for a quiet zone surrounding the Project Site and then asks for the status update on the request. The comment also asks whether the Planning Commission will ensure that no quiet zone be implemented at the 13th Street rail crossing as a condition of approval. The Project does not include a request for a quiet zone, and, as such, a quiet zone is not under consideration

Response to Comment No. P3-8

The comment states that the potential impact of traffic delay and increased travel times for emergency response vehicles, especially in the event of a railroad emergency, is a critical concern and asks what measures the Planning Commission will put in place to minimize any adverse effects on emergency response times and public safety as a condition of approval.

The Transportation Assessment (Appendix L of the Draft EIR) contains a specific evacuation memo (Appendix H) that discusses the difference between existing evacuation conditions and evacuation conditions with the Project both without and without the roundabout and without and without the Dockweiler Drive Extension Project. In all cases, the evacuation times would improve with the Project due to the off-site improvements, including widening of 13th Street, Arch Street, and 12th Street and the signalization of the intersections of 13th Street and Arch Street and 12th Street and Arch Street, that would be implemented by the Project to provide additional roadway capacity and accommodate existing and future traffic volumes with the addition of Project traffic regardless of the completion of the Dockweiler Drive Extension Project since the Project is not dependent on its completion. These off-site improvements would facilitate the evacuation of the Placerita Canyon area by reducing the evacuation congestion period at Arch Street and 12th Street. The traffic signal intersection design, when compared to the roundabout design or existing conditions, would provide for the most efficient traffic operations under an evacuation scenario, as well as accommodate horse trailers more easily.

With regard to Placerita Canyon Road, if the Dockweiler Drive Extension Project is not implemented, the Project would be conditioned to extend Arch Street to Placerita Canyon Road

and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of the Draft EIR.

Response to Comment No. P3-9

The comment states that the impact of increased traffic from the Project on every day travel and the evacuation routes for Placerita Canyon residents during emergencies is a matter of great concern and asks whether the Planning Commission will require the applicant to formalize an evacuation plan for studio personnel that does not add to evacuation traffic at the 13th Street and Arch Street intersection or have vehicles inadvertently travel a private road off of Placerita Canyon Road where they would not have the ability to exit. The comment also asks whether the Planning Commission will require alternate routes as a condition of approval.

Please refer to Response to Comment No. P3-3 above regarding alternate routes. In addition, the Project would be required and be responsible for the preparation of an Emergency Operation Plan, which will include evacuation routes and plans to instruct Project vehicles to the most appropriate and safest routes.

Response to Comment No. P3-10

The comment claims that the lack of consideration of the potential of incompatible land use in the Draft EIR is disconcerting and asks the Planning Commission to require City staff to thoroughly study land use as a condition of approval. The comment asserts that it is crucial to avoid situations where new developments disrupt or displace existing businesses and activities that contribute to the community's character and quality of life.

The Project Site is current vacant, and its development would not disrupt or displace existing business and activities. It should also be noted that a large portion of the Project Site is zoned MXN (Mixed Use Neighborhood), and only the area north and a small area south of Placerita Creek are zoned NU5 (Non-Urban 5, one dwelling unit per acre). The Project is permitted in the MXN zone with approval of a Conditional Use Permit (CUP).

Section 4.10, Land Use and Planning, of the Draft EIR, provided an extensive analysis of the Project's consistency with applicable plans and policies. In addition to implementing Project features in accordance with the provisions of the PCSSD specifically for the North Newhall Area, the Project has also been designed to comply with the City of Santa Clarita Community Character and Design Guidelines.

The comment does not identify any specific impacts of the Project to support the lack of consideration of the potential of incompatible use. As demonstrated in the responses to comments throughout this Final EIR, the Draft EIR adequately and accurately disclosed the environmental impacts of the Project and determined that no significant and unavoidable impacts would result from Project implementation. The comment does not provide any evidence to the contrary, and no additional response is warranted. However, the comment is noted and will be forwarded to the decision-makers for consideration.

Response to Comment No. P3-11

The comment questions the viability of the Project and future implications if some or most of the sound stages are not rented once the Project is completed and asks the Planning Commission whether provisions will be placed on acceptable usage of the Project. The comment asserts that

the community needs assurances that the Project will not have a negative impact on the community if it does not operate as initially envisioned.

CEQA Guidelines Section 15064(d) requires the lead agency to "consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project." CEQA Guidelines Section 15064(d)(3) specifically states that "An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." The level of use and occupancy of the Project in the future is speculative, and, as such, the indirect physical change is not required to be considered. However, the direct physical change from the under-operation of the Project would be reduced impacts to air quality, energy, noise, public services, transportation, and utilities and service systems.

Response to Comment No. P3-12

The comment questions whether the Planning Commission will consider the MWD's approval as a condition for the Project approval and what alternative plans are in place if the MWD does not grant the requested approvals. Use of the MWD property is not required for the operation of the Project. The Project Site can accommodate the required parking. Any use of the MWD property would be subject to the approval of MWD.

Response to Comment No. P3-13

The comment questions whether the Planning Commission will consider requesting the bequeathal of property for public use of a cultural center adjacent to the Project Site and/or contribute financially to the Placerita Canyon Property Owners Association for furtherance of their mission to preserve and protect the rural equestrian lifestyle of the canyon. The comment does not specify the impacts or address the adequacy of the Draft EIR. Accordingly, the comment is noted and will be forwarded to the decision-makers for consideration. No additional response is warranted.

Response to Comment No. P3-14

The comment urges the Planning Commission to carefully consider and address the concerns raised in this letter and all the questions and concerns interested parties have raised and that the Planning Commission conduct an all-inclusive discussion of the Project, considering all the public's concerns. The comment does not specify the impacts or address the adequacy of the Draft EIR. Accordingly, the comment is noted and will be forwarded to the decision-makers for consideration. No additional response is warranted.

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LETTER P4

From: Cynthia Harris <moongoddessgreek@gmail.com>
Sent: Tuesday, May 23, 2023 1:59 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Studio Project MC21-109

Hello Ms. Iverson,

Please ask the developer for an updated Oak Tree Report as the current one was completed during the drought and needs to be revised now that they have received rain. Their conditions have improved. Also the Carbon Sequestration has not been considered in the removal of these Heritage Oak Trees. Carbon sequestration is the capturing, removal and storage of carbon dioxide (CO2) from the earth's atmosphere. It's recognised as a key method for removing carbon from the earth's atmosphere.

This is important, as around 45% of the CO2 emitted by humans remains in the atmosphere, which is a significant factor behind global warming. Carbon sequestration can prevent further emissions from contributing to the heating of the planet.
Carbon sequestration can happen in two basic forms: biologically or geologically. Also, while it's being encouraged artificially through various biological and geological methods, it also happens naturally in the environment on the biggest scale.
What is biological carbon sequestration?
Biological carbon sequestration happens when carbon is stored in the natural environment. This includes what are known as 'carbon sinks', such as forests, grasslands, soil, oceans and other bodies of water. This is also known as an 'indirect' or passive form of sequestration.

P4-1

Forests and woodlands are considered one of the best forms of natural carbon sequestration. CO2 binds to plants during photosynthesis, exchanging it for oxygen as a purifying emission.
On average, forests store twice as much carbon as they emit, while an estimated 25% of global carbon emissions are sequestered alongside forests in other vegetative forms, such as grasslands or rangelands (fields, prairies, shrublands etc.).
Protecting such natural environments is therefore crucial to ensuring carbon sinks capture CO2 effectively.
Deforestation poses the biggest threat to this natural process, as does construction or intensive agriculture.

Trees also store carbon dioxide in their fibers helping to clean the air and reduce the negative effects that this CO2 could have had on our environment. According to the Arbor Day Foundation, in one year a mature tree will absorb more than 48 pounds of carbon dioxide from the atmosphere.

The best solution for this project is "alternate # 3" which allows the construction AROUND the many California Native Oak Trees.

Cynthia Harris

Letter No. P4
Cynthia Harris

Response to Comment No. P4-1

The comment requests that the developer update the oak tree report prepared for the Project as their conditions may have improved as asserted in the comment. However, the condition of the existing oak trees on-site is not a factor in their removal to accommodate the development of the Project. The comment proceeds to discuss carbon sequestration and the role of oak trees in capturing, removing, and storing carbon dioxide from the atmosphere. Carbon Sequestration calculation methodologies vary. One method developed by the U.S. Environmental Protection Agency, known as Enviro Atlas (www.epa.gov/enviroatlas), considers a canopy area calculation approach, which uses tree canopy square footage (tree cover) to estimate carbon sequestration.

Although 13 protected oak trees, including seven heritage oaks trees, would be removed to accommodate Project development, the Project would replace the removed trees with 211 oak trees, including coast live oak, Engelmann oak, valley oak, and southern live oak, in addition to 450 trees of different non-oak varieties, including Bubba desert willow, Tuscarora crape myrtle, Brisbane box, little gem magnolia, fruitless olive, Canary Island pine, icee blue podocarpus, and Columbia plane tree. To estimate the amount of carbon sequestration from the 13 existing oak trees to be removed and the 211 replacement oak trees, the total canopy area (square feet) was determined. Based on this approach, the canopy area of oak trees proposed for removal is approximately 20,700 square feet (based on measurements taken from scalable aerial photography), and the proposed tree canopy that would be replaced by the 211 oak tree plantings would be approximately 11,200 square feet. Although there is a difference of approximately 9,500 square feet, the oak trees that would be removed are of varying ages and are in fair to very poor health; whereas the new trees that would be planted will be young and in good to excellent health. This reduction in tree cover is temporary. Within 10 to 15 years, the newly planted oak trees would exceed the total canopy area (tree cover) of the oak trees that would be removed. At full maturity, the long term benefit of the greater number of healthy mitigation replacement trees would result in a substantially greater tree canopy area and increased carbon sequestration over a longer period of time.

In addition, the comment states that the best solution for the Project is Alternative 3, which the comment asserts would allow the construction around the oak trees on-site. As discussed on page 5.0-7 in Section 5.0, Alternatives, of the Draft EIR, because Alternative 3 would disturb the same footprint as the Project, the 13 oak trees proposed to be removed under the Project would also be removed under this alternative with the same number of replacement trees provided as the Project.

3.0 Errata and Clarifications to the Draft EIR

This section identifies minor edits and changes to the Draft EIR in response to public comments received, as well as minor staff edits, to revise or clarify the information in the Draft EIR. The changes provide clarification and additional information for the Draft EIR but do not alter the analysis or conclusions of the document.

Changes were made to the Draft EIR pages as noted below and are identified with revision marks (underline for new text and strike through for deleted text).

Section 2.0, Project Description

The second bullet on page 2.0-22 under Section 2.4.6, Off-Site Improvements, was revised as follows:

- Widening of 13th Street, Arch Street, and 12th Street and installation of traffic signals at the intersections of 13th Street and Arch Street and 12th Street and Arch Street;

The following was added to the fourth bullets on page 2.0-22 under Section 2.4.6, Off-Site Improvements:

- Required railroad crossing improvements at 13th Street that consist of the following:
  - Widening of the rail crossing at 13th Street and Railroad Avenue;

The following was added at the end of Section 2.4.6, Off-Site Improvements, on page 2.0-23:

> If the Dockweiler Drive Extension Project is not completed prior to the completion of Project construction, the Project would be conditioned to extend Arch Street to Placerita Canyon Road and complete the two-legged intersection of Placerita Canyon Road and Arch Street, as indicated in the Tentative Tract Map included in Appendix B of this Draft EIR.

The following was added after the last bullet on page 2.0-25 as follows:

> To allow for operation of equipment emitting air pollutants, including, but not limited to, emergency generators and fire water pumps, the following permit would be required:
>
> - Air Permits from South Coast AQMD

Section 4.3, Biological Resources

The following was added after the first paragraph on page 4.3-5:

> **Crotch's bumble bee (*Bombus crotchii*)** (a candidate CESA-listed species) inhabits open grassland or scrub habitats from coastal California east to the Sierra-Cascade crest and south into Mexico. The species nests primarily in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, underbrush piles, in old bird nests, and in dead trees or hollow logs.[2] Overwintering sites utilized by Crotch's bumble bee mated queens

include soft, disturbed soil, or under leaf litter or other debris.[3] Ten CNDDB records of Crotch's bumble bee are documented within the regional vicinity of the Project Site including five records between 2017-2020, the closest of which is approximately 2.5 miles to the southwest. While the majority of the Project Site is disturbed or vegetated with non-native grasslands with few floral resources, upland scrub communities within the Project Site provide suitable overwintering and foraging habitat for the species, and the species has a potential to occur.

[2] Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla, Bumble Bees of North America: An Identification Guide, 2014, p. 208; Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee, A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species, 2018.

[3] Goulson, D., Bumblebees: Behavior, Ecology, and Conservation, 2010, p. 317.

The following was added after the second paragraph on Page 4.3-6:

Mountain Lion

The Project Site is within the range of the Southern California/Central Coast Evolutionary Significant Unit of mountain lion (*Puma concolor*) (a candidate CESA-listed species), and scrub vegetation communities within the Project Site provide moderately suitable foraging habitat for the species.[4] However, the likelihood for mountain lion to be present within the Project Site is low due to a variety of factors: the Project Site is not within a natural landscape block; the nearest blocks are within the Santa Susana Mountains southwest of Highway 5 and the San Gabriel Mountains east of the Antelope Valley (S.R. 14) Freeway.[5] The CDFW mountain lion habitat suitability dataset predicts relatively low probability of use within the Project Site, similar to the urban center of Santa Clarita.[6] The Project Site is bounded to the southwest and southeast by commercial development, and to the east by residential development. While Placerita Creek may provide local movement pathways for mobile species such as mule deer and coyote, on a broader landscape scale Placerita Creek and its surrounding open spaces (including Quigley Canyon Open Space) are cut off from suitable mountain lion habitat linkages and corridors by S.R. 14 approximately 2 miles to the east. A review of iNaturalist shows that mountain lions or their sign (e.g., scat, tracks) were not documented within the Santa Clarita Valley in the area bounded by Highway 5, S.R. 14, and the Santa Clara River. Newhall Creek, situated downstream of the Project Site, is heavily constrained on both sides by intensive residential and commercial development. Accordingly, the potential for mountain lion occurrence is low and Placerita Creek is not likely to function as regional movement pathway for mountain lions, which require extensive home ranges. Due to the extensive development surrounding the Project Site discussed above, human presence due to surrounding land uses is already at a high level and development of the Project would not represent a significant change in this condition. Additionally, the Project would maintain Placerita Creek as a natural bottom drainage course and, thus, would not introduce new barriers within Placerita Creek that would impede mountain lion movement or dispersal, or constrain wildlife corridors and pinch

points leading to severed migration. Accordingly, the Project would not result in adverse impacts to mountain lion.

[4] CDFW, Mountain Lion Predicted Habitat – CWHR M165 [ds 2616], https://map.dfg.ca.gov/metadata/ds2616.html, accessed June 2023.
[5] CDFW, Natural Landscape Blocks – California Essential Habitat Connectivity (CEHC) [ds621], https://map.dfg.ca.gov/metadata/ds0621.html?5.66.18, accessed June 2023.
[5] CDFW Mountain Lion Habitat Suitability – Summer – CDFW [ds2916], https://map.dfg.ca.gov/metadata/ds2916.html, accessed June 2023.

The following was added after the third paragraph on page 4.3-18:

If Crotch's bumble bee is present during Project construction, ground disturbance and vegetation removal from the Project Site during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas within and adjacent to the Project Site. In addition to potential habitat loss, human disturbance, heavy machinery, and construction activities could potentially result in direct mortality to Crotch's bumble bee adults, eggs, or larvae. These impacts would be potentially significant.

The last sentence under "**FIELD RECONNAISSANCE SURVEY**" on page 4.3-16 was revised as follows:

Representative photographs of the Project Site were taken and an inventory of all plant and vertebrate wildlife species observed was compiled (provided in Appendix **D**).

The following revisions were made to MM-BIO-1 on page 4.3-19:

MM-BIO-1: The Project shall implement the following best management practices (BMPs) during construction:

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries;
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction;
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species;
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be disposed of in closed containers only and removed daily from the Project Site;
- No deliberate feeding of wildlife shall be allowed;
- No pets shall be allowed on the Project Site;
- No firearms shall be allowed on the Project Site;

- If vehicle or equipment maintenance is necessary, it shall be performed In the designated staging areas;
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife; ~~and~~
- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills;~~.~~
- Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the Project goal and minimize impacts to jurisdictional resources and sensitive natural communities, including locating access routes and ancillary construction areas outside of these areas;
- To the satisfaction of the City, the Applicant shall retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan shall describe all species of special concern (SSC) that could occur within the Project Site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the Project Site. The qualified biologist should submit a copy of a Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the Project Site;
- To the satisfaction of the City, the Applicant shall retain a qualified biologist to conduct worker environmental awareness training. The qualified biologist shall communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so; and
- To avoid direct injury and mortality of SSC, the Applicant shall have a qualified biologist on-site to relocate wildlife of low mobility that may be injured or killed because of development. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project Site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist shall advise workers to proceed with caution.

A qualified biologist shall be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist shall be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project phase until the cessation of all ground and habitat disturbing activities, as well as vegetation removal, to ensure that no wildlife is harmed.

The biological monitor(s) shall have appropriate handling permits or shall obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.

A Scientific Collecting Permit is required to monitor Project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (14 Cal. Code of Regs. Section 650). The CDFW's Scientific Collection Permits webpage (https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678) provides additional information.

If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist should be notified, and dead or injured wildlife be documented immediately. A formal report shall be sent to CDFW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation techniques have been identified to prevent additional injury or death.

The following was added after the last paragraph on page 4.3-19:

MM-BIO-6: The Permittee must retain a qualified biologist with the appropriate take authorization (if such authorizations are available to biologists at the time of survey) to conduct surveys to determine presence/absence. A survey must be conducted at least one year before the City issues a grading permit. The survey must review the entire Project Site by a qualified biologist familiar with the species' behavior and life history. A minimum of three surveys must also be conducted during peak flying season when the species is most likely to be detected above ground, between March 1 to September 1.[11] The qualified biologist must utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species

confirmation.[12] During the surveys, the biologist must identify inactive small mammal burrows and other potential nest sites with visible flags to reduce the risk of take. Survey results, including negative findings, must be submitted to CDFW applying for appropriate permits. At a minimum, a survey report provide the following:

a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. The map must show surveyor(s) track lines to document that the entire site was covered during field surveys.

b) Field survey conditions that include name(s) of qualified biologist(s) and brief qualifications, date and time of survey, survey duration, general weather conditions, survey goals, and species searched.

c) Map(s) showing the location of nests/colonies.

d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony, if any, is found. A sufficient description of biological conditions, primarily impacted habitat, must include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

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[11] Robbin W. Thorp, Donald S. Horning Jr., and Lorry L. Dunning, Bumble Bees and Cuckoo Bumble Bees of California, Bulletin of the California Insect Survey 23, 1983.

[12] California Bumble Bee Atlas, Photography Tips and Bee Processing Workflow, https://www.cabumblebeeatlas.org/photography-tips.html, accessed June 7, 2023.

MM-BIO-7: If Crotch's bumble bees are detected, the qualified biologist must identify the location of any nests within and adjacent to the Project Site. A 15-meter no disturbance buffer zone must be established around any identified active nest(s) to reduce the risk of disturbance or accidental take. A qualified biologist may expand the buffer zone as necessary to prevent disturbance or take.

MM-BIO-8: If Crotch's bumble bee is detected and impacts to Crotch's bumble bee cannot be feasibly avoided, the Permittee must consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to California Fish and Game Code Section 2080, *et seq*). Appropriate authorization from CDFW under the California Endangered Species Act (CESA) may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options (California Fish and Game Code Sections 2080.1, 2081). Early consultation is encouraged, as significant modification to the Project and mitigation techniques

may be required to obtain an ITP. The California Fish and Game Code may require that CDFW issue a separate CEQA document before issuing an ITP for the Project unless the Project's CEQA document addresses all Project impacts on CESA endangered, threatened, and/or candidate species.

MM-BIO-9: Any floral resource associated with Crotch's bumble bee that will be removed or damaged by the Project must be replaced at not less than 1:1. Floral resources must be replaced as close to their original location as feasible. If active Crotch's bumble bee nests are identified and floral resources cannot be replaced within 200 meters of their original location, floral resources must be planted in the most centrally available location relative to identified nests. This location should be not more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources must be maintained in perpetuity and be replanted and managed as needed to ensure the habitat is preserved.

The first paragraph on page 4.3-20 was revised as follows:

Implementation of **Mitigation Measures MM-BIO-1** through **MM-BIO-3** and **MM-BIO-6** through **MM-BIO-9** would reduce the potential to impact candidate, sensitive, or special-status species, including Crotch's bumble bee, southern California rufous-crowned sparrow, Cooper's hawk, and yellow warbler, as well as other native birds protected under the MBTA and CFGC, to a less-than-significant level.

Section 4.5, Energy

The discussion under Subsection 4.5.5, Project Design Features, was revised as follows:

4.5.5 PROJECT DESIGN FEATURES

No specific Project Design Features are proposed with respect to energy resources. However, Project Design Feature~~s~~ PDF-GHG-1 ~~and PDF-GHG-2~~ in Section 4.7, Greenhouse Gas Emissions, of this Draft EIR would reduce the Project's energy consumption.

The last sentence in the first full paragraph after Table 4.5-2 on page 4.5-11 was revised as follows:

Moreover, in accordance with Project Design Feature PDF-GHG-1~~2~~, the Project would install rooftop photovoltaic (PV) systems and solar panels for all the sound stage buildings and the support building for localized use, which would exceed California Energy Code standards and reduce the Project's demand on SCE supplies.

The second to last sentence in the last paragraph on page 4.5-11 was revised as follows:

> Furthermore, the Project Site would provide EV charging stations and EV-ready parking spaces pursuant to the requirements of the CALGreen Code ~~Project Design Feature PDF-GHG-1~~, which would reduce fuel usage.

The second sentence under "***State Energy Regulations***" on page 4.5-12 was revised as follows:

> Furthermore, ~~in accordance with PDF-GHG-1 and PDF-GHG-2,~~ the Project ~~Site~~ would provide EV charging stations and EV-ready parking spaces pursuant to the requirements of the CALGreen Code~~,~~ and install rooftop PV systems and solar panels for all the sound stage buildings and the support building for localized use in accordance with Project Design Feature PDF-GHG-1.

Section 4.7, Greenhouse Gas Emission

The last sentence in the first paragraph on page 4.7-13 was revised as follows:

> Operation of the Project would generate approximately ~~11,373~~ 11,707 $MTCO_2e$ per year, which includes the amortized construction emissions.

The Mobile Emission Source and the Total Annual Emissions in Table 4.7-2 on page 4.7-13 were revised as follows:

Table 4.7-3
PROJECT OPERATION GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions (MTCO2e)
Construction[a]	196
Operation	11,177
Area	<1
Energy	1,688
Mobile	~~8,627~~8,960
Solid Waste	774
Water	12
Generators	37
Food Trucks[b]	39
Total	**~~11,373~~11,707**

Notes:
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
[a] Amortized construction-related GHG emissions over 30 years.
[b] Food truck emissions account for electricity and waste emissions only. Mobile emissions are assumed to be part of the anticipated daily emissions quantifications and are included under mobile emissions.
*Refer to **Appendix C** of this Draft EIR for detailed model input/output data.*
Source: Rincon Consultants, Inc. 2023.

The last sentence in the last paragraph on page 4.7-13 was revised as follows:

> As shown in **Table 4.7-3**, operation of the Project with the application of the reductions discussed above would generate approximately ~~7,252~~ 7,586 MTCO2e per year.

The Mobile Emissions and the Total emissions in Table 4.7-3 on page 4.7-14 were revised as follows:

Table 4.7-4
PROJECT OPERATION REDUCED GREENHOUSE GAS EMISSIONS

Emission Source	Annual Emissions ($MTCO_2e$)
Construction[a]	196
Operation	7,056
Area	<1
Energy	1,688
Additional Renewables Portfolio Standard Reduction	(183)
Mobile	~~8,627~~8,960
Electric Vehicle Charging Stations	(3,357)
Solid Waste	774
Assembly Bill 341	(581)
Water	12
Generators	37
Food Trucks[b]	39
Total	**~~7,252~~7,586**

Notes:
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
[a] Amortized construction-related GHG emissions over 30 years.
[b] Food truck emissions account for electricity and waste emissions only. Mobile emissions are assumed to be part of the anticipated daily emissions quantifications and are included under mobile emissions.
*Refer to **Appendix C** of this Draft EIR for detailed model input/output data.*
Source: Rincon Consultants, Inc. 2023.

The following was added to the second to last sentence of the first full paragraph on page 4.7-15:

> The Project's consistency with the applicable 2020-2045 RTP/SCS strategies is discussed in **Table 4.7-4**, as well as in **Table 4.10-1** in Section 4.10, Land Use and Planning, of this Draft EIR.

Section 4.13, Public Services

The second to last sentence in the last full paragraph on page 4.13-9 was revised as follows:

> The proposed buildings would be equipped with an approved automatic fire sprinkler system. In addition, ~~As~~ discussed in Section 4.16, Utilities and Service Systems, the Project would be required to install 8 public fire hydrants and ~~36~~ 21 public on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to construction, and 15 private on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to building occupancy. ~~to accommodate the development.~~

Section 4.16, Utilities and Service Systems

The first three sentences in the second paragraph under Threshold 4.16(a) on page 4.16-24 were revised as follows:

> In addition, the Project would install 8-inch water meters (rated for 3,500 gpm continuous flow and 4,700 gpm as the maximum intermittent flow) in order to meet the fire-flow requirements for the Project, which is set at ~~2,500 gpm for 2 hours~~

4,000 gpm for 4 hours at 20 psi. Three public fire hydrants flowing simultaneously may be used to achieve the required fire flow.~~With regard to public fire flow, the Los Angeles County Fire Department's Fire Prevention Division has stipulated a requirement of 4,000 gpm at 20 psi for a duration of 4 hours. If multiple hydrants are used to meet this requirement, each hydrant would be required to have a flow of 1,250 gpm minimum for 2 hours at 20 psi.~~

Section 4.17, Wildfire

The second full paragraph on page 4.17-13 was revised as follows:

~~Pursuant to County Code Section 20.16.060, the Project Site would meet a 2-hour on-site fire flow requirement of 2,500 gallons per minute (gpm) with a residual pressure of 20 pounds per square inch (psi).~~ As discussed in Section 4.16, Utilities and Service Systems, of this Draft EIR, the Project would install 8-inch water meters (rated for 3,500 gpm continuous flow and 4,700 gpm as the maximum intermittent flow) in order to provide adequate fire flow support on-site. Furthermore, as required by the Santa Clarita Valley Water Agency (SCV Water), the Project's service connections and metering would be sized for dual service for domestic and fire water needs. The LACoFD's Fire Prevention Division has also stipulated a public fire flow requirement of 4,000 gpm at 20 psi for a duration of 4 hours. Three public fire hydrants flowing simultaneously may be used to achieve the required fire flow.~~ If multiple hydrants are used to reach this requirement, each hydrant used would be required to have a flow of 1,250 gpm minimum for 2 hours at 20 psi, which would require the~~ Project would be required to install 8 public fire hydrants and ~~36~~ 21 public on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to construction, and 15 private on-site fire hydrants, which would need to be installed, tested, and accepted by LACoFD prior to building occupancy.~~ to accommodate the proposed development.~~ In addition, the Project would connect to existing electrical and telecommunications infrastructure surrounding the Project Site. The required water meters and fire hydrants would comply with SCV Water and LACoFD standards.

Section 5.0, Alternatives

The second sentence in the last paragraph on page 5.0-22 in Section 5.0, Alternatives, of the Draft EIR, was revised as follows:

~~As with the Project,~~ Based on the information provided by the LACSD, the amount of wastewater generated by Alternative 2 is~~ based on the water demand identified above, which is equal to 0.32 million~~ 198,419 gallons per day (gpd). The water demand and the solid waste and wastewater generation are ~~substantially~~ greater than those identified for the Project (i.e., 207 AFY of water, ~~0.19 mgd~~ 186,301 gpd of wastewater, and 2,900 pounds of solid waste).

Appendix C: Air Quality and Greenhouse Gas Emissions Study

The 12th line item/adjustment factors on page 2 of 36 in the CalEEMod Output in Appendix A was revised as follows:

Construction Off-road Equipment Mitigation – SCAQMD Rule 403, watering and vehicle speed from Table 1 BACT applicable to all construction activity. Based on

applicant information, the construction fleet > 50 HP would be equipped with Tier 4~~-~~3 engines and level 3 DPF filters

Appendix L: Transportation Assessment

Table 17 on page 125 was revised as follows:

Table 17
EXISTING CONDITIONS WITH RAILROAD CROSSING UPGRADE (YEAR 2021)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact
1.	Bouquet Canyon Road &	A.M.	48.2	D	48.8	D	0.6	No
	Newhall Ranch Road	P.M.	50.7	D	50.6	D	-0.1	No
2.	Bouquet Canyon Road &	A.M.	30.0	C	30.3	C	0.3	No
	Valencia Boulevard/Soledad Canyon Road	P.M.	46.4	D	46.1	D	-0.3	No
3.	Railroad Avenue/Bouquet Canyon Road &	A.M.	28.7	C	32.3	C	3.6	No
	Magic Mountain Parkway	P.M.	25.9	C	25.4	C	-0.5	No
4.	Railroad Avenue &	A.M.	13.0	B	12.4	B	-0.6	No
	Oak Ridge Drive	P.M.	12.6	B	22.2	C	9.6	No
5.	Railroad Avenue &	A.M.	21.9	C	23.2	C	1.3	No
	13th Street	P.M.	23.9	C	25.0	C	1.1	No
6.	Railroad Avenue &	A.M.	21.2	C	31.9	C	10.7	No
	Lyons Avenue	P.M.	28.5	C	28.8	C	0.3	No
7.	Railroad Avenue &	A.M.	10.5	B	11.3	B	0.8	No
	Newhall Avenue	P.M.	15.4	B	25.2	C	9.8	No
8.	Valle Del Oro &	A.M.	12.6	B	12.2	B	-0.4	No
	Newhall Avenue	P.M.	9.8	A	9.6	A	-0.2	No
9.	Sierra Highway &	A.M.	57.7	E	57.1	E	-0.6	No
	Newhall Avenue	P.M.	40.3	D	41.0	D	0.7	No
10.	SR 14 Southbound Ramp &	A.M.	0.1	A	0.1	A	0.0	No
[a]	Newhall Avenue	P.M.	0.3	A	0.3	A	0.0	No
11.	SR 14 Northbound Ramp &	A.M.	0.2	A	0.2	A	0.0	No
[a]	Newhall Avenue	P.M.	91.7	F	91.7	F	0.0	No
12.	I-5 Northbound Ramps &	A.M.	23.2	C	23.4	C	0.2	No
	Lyons Avenue	P.M.	33.9	C	34.8	C	0.9	No
13.	Wiley Canyon Road &	A.M.	35.5	D	35.4	D	-0.1	No
	Lyons Avenue	P.M.	42.4	D	43.0	D	0.6	No
14.	Valley Street/Orchard Village Road &	A.M.	36.3	D	37.0	D	0.7	No
	Lyons Avenue	P.M.	39.3	D	40.1	D	0.8	No
15.	Newhall Avenue &	A.M.	36.1	D	34.0	C	-2.1	No
	Lyons Avenue	P.M.	33.1	C	32.7	C	-0.4	No
16.	Arch Street & 13th Street & Project Driveway #1	A.M.	New Intersection		31.1	C	N/A	No
[b]	& Project Driveway #2	P.M.			30.1	C	N/A	No
17.	Arch Street & 12th Street	A.M.	3.4	A	3.2	A	-0.2	No
[a]	& Placerita Canyon Road	P.M.	4.9	A	4.6	A	-0.3	No
18.	Dockweiler Drive &	A.M.	New Intersection					
[c]	Placerita Canyon Road	P.M.						
19.	Valle Del Oro &	A.M.	9.1	A	9.1	A	0.0	No
[a]	Dockweiler Drive	P.M.	8.3	A	8.3	A	0.0	No
20.	Sierra Highway &	A.M.	58.6	E	59.7	E	1.1	No
	Dockweiler Drive	P.M.	8.1	A	8.0	A	-0.1	No
21.	Sierra Highway &	A.M.	17.9	B	20.4	C	2.5	No
	Placerita Canyon Road	P.M.	16.0	B	18.0	B	2.0	No
22.	Sierra Highway &	A.M.	2.2	A	2.2	A	0.0	No
[a]	SR 14 Southbound Ramps	P.M.	6.4	A	7.1	A	0.7	No
23.	SR 14 Northbound Ramps &	A.M.	4.7	A	4.9	A	0.2	No
[a]	Placerita Canyon Road	P.M.	4.7	A	4.9	A	0.2	No

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is 2-way stop-controlled
[b] Future intersection to be constructed by the Project.
[c] Intersection would be constructed as part of the Dockweiler Extension

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4.0 Mitigation Monitoring and Reporting Program

The environmental mitigation measures identified in **Table 4-1**, Mitigation Monitoring and Reporting Program, on the following pages, were incorporated into the approval for this Project in order to reduce potentially significant environmental impacts. In addition, the project design features (PDF) proposed by the Project are included in **Table 4-1** to ensure that these PDF are implemented prior to the issuance of a Certificate of Occupancy. A completed and signed checklist for each mitigation measure or PDF indicates that the mitigation measure or PDF has been complied with and implemented and fulfills the City of Santa Clarita's monitoring requirements with respect to PRC Section 21081.6. The mitigation measures and PDFs are numbered as presented in the Draft EIR.

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Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
AIR QUALITY					
PDF-AQ-1	The Project will operate off-road diesel-powered construction equipment to meet or exceed CARB and USEPA Tier 3 off-road emissions standards with Level 3 diesel particulate filters or be alternatively (non-diesel) fueled to reduce diesel exhaust emissions.	Field inspection sign off	City of Santa Clarita Community Development Department, Planning Division	During construction	
PDF-AQ-2	Off-road diesel-powered construction equipment will meet or exceed the CARB and USEPA Tier 3 off-road emissions standards and be equipped with Level 3 diesel particulate filters at a minimum.	Field inspection sign off	City of Santa Clarita Community Development Department, Planning Division	During construction	
BIOLOGICAL RESOURCES					
MM-BIO-1	The Project shall implement the following best management practices (BMPs) during construction: • The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries; • Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction; • All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species; • All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be disposed of in closed containers only and removed daily from the Project Site; • No deliberate feeding of wildlife shall be allowed; • No pets shall be allowed on the Project Site;	Field inspection sign off	City of Santa Clarita Community Development Department, Planning Division	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	• No firearms shall be allowed on the Project Site; • If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas; • If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife; • During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills; • Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the Project goal and minimize impacts to jurisdictional resources and sensitive natural communities, including locating access routes and ancillary construction areas outside of these areas; • To the satisfaction of the City, the Applicant shall retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan shall describe all species of special concern (SSC) that could occur within the Project Site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the Project Site. The qualified biologist should submit a copy of a Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the Project Site; • To the satisfaction of the City, the Applicant shall retain a qualified biologist to conduct worker environmental awareness training. The qualified biologist shall				

Table 4-1
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Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	communicate to workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so; and • To avoid direct injury and mortality of SSC, the Applicant shall have a qualified biologist on-site to relocate wildlife of low mobility that may be injured or killed because of development. Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the Project Site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist shall advise workers to proceed with caution. A qualified biologist shall be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist shall be on site weekly or bi-weekly (once every two weeks) for the remainder of the Project phase until the cessation of all ground and habitat disturbing activities, as well as vegetation removal, to ensure that no wildlife is harmed. The biological monitor(s) shall have appropriate handling permits or shall obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. A Scientific Collecting Permit is required to monitor Project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (14 Cal. Code of Regs. Section 650). The CDFW's Scientific Collection Permits				

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	webpage (https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678) provides additional information. If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist should be notified, and dead or injured wildlife be documented immediately. A formal report shall be sent to CDFW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation techniques have been identified to prevent additional injury or death.				
MM-BIO-2	A qualified biological monitor familiar with special-status species with potential to occur on the Project Site shall be present during initial ground disturbance or vegetation removal activities. The biological monitor shall have the authority to temporarily stop work if one or more individuals of these special-status species are observed; the monitor shall then relocate these individuals to suitable undisturbed habitat, outside the areas directly and indirectly affected by ground disturbance activities.	Preparation and submittal of a report by a qualified biologist to the City that documents ground disturbance or vegetation removal activities to the City	City of Santa Clarita Community Development Department, Planning Division	During construction	
MM-BIO-3	Construction activities should occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than three days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird preconstruction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (500 feet for raptors), where feasible. If the Proposed Project is phased or construction activities stop for more than one week,	Surveys performed by a qualified biologist; preparation and submittal of a report by a qualified biologist to the City that documents the results of the survey	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	

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Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	a subsequent preconstruction nesting bird survey shall be required prior to each phase of construction. Preconstruction nesting bird surveys shall be conducted during the time of day when birds are active (typically early morning or late afternoon) and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to the property owner/developer for review and approval prior to ground and/or vegetation disturbance activities. If nests are found, their locations shall be flagged. An appropriate avoidance buffer for passerines is generally 100 feet and up to 500 feet for raptors; however, the buffer distance may be modified by a qualified biologist depending upon the species and the proposed work activity. The avoidance buffer shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable material that is clearly visible to construction personnel and heavy equipment operators. Active nests shall be monitored periodically by a qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If no nesting birds are observed during preconstruction surveys, no further actions would be necessary.				
MM-BIO-4	Impacts to sensitive vegetation communities shall be avoided to the greatest extent feasible. Compensatory mitigation for impacts to big sagebrush scrub and scale broom scrub communities, such as on-site restoration, off-site restoration, or purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., on-site restoration), to reduce impacts to sensitive vegetation communities shall be accomplished at a minimum ratio of 1:1; however, the final ratio shall be determined and approved by	Review and approval of compensatory mitigation by CDFW	CDFW; City of Santa Clarita Community Development Department, Planning Division	Prior to issuance of grading permit	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	the California Department of Fish and Wildlife (CDFW) prior to issuance of a grading permit. If on-site or off-site restoration is feasible, a Restoration Plan shall be prepared and submitted for approval by the CDFW prior to initiating construction or any site disturbance. At a minimum, the Restoration Plan shall include the following: • A description of the purpose and goals of the restoration • Identification of success criteria and performance standards • Methods of site preparation • Irrigation plan and schedule • Best management practices • Maintenance and monitoring program • Adaptive management strategies • Key stakeholders and responsible parties • Funding • Contingencies				
MM-BIO-5	Compensatory mitigation for temporary and permanent impacts to land subject to the jurisdiction of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW, such as purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., on-site restoration), shall be accomplished at a minimum ratio of 1:1; however, the final ratio shall be determined and approved by the USACE, RWQCB, and/or CDFW prior to impacting state- or federally regulated waters. If on-site restoration would occur, a Restoration Plan, as identified in Mitigation Measure MM-BIO-4, shall be prepared and submitted for approval by CDFW, USACE, and RWQCB prior to initiating construction or any site disturbance.	Review and approval of compensatory mitigation and/or preparation and submittal of a Restoration Plan to CDFW, USACE, and/or RWQCB	CDFW, USACE, and/or RWQCB; City of Santa Clarita Community Development Department, Planning Division	Pre-construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
MM-BIO-6	The Permittee must retain a qualified biologist with the appropriate take authorization (if such authorizations are available to biologists at the time of survey) to conduct surveys to determine presence/absence. A survey must be conducted at least one year before the City issues a grading permit. The survey must review the entire Project Site by a qualified biologist familiar with the species' behavior and life history. A minimum of three surveys must also be conducted during peak flying season when the species is most likely to be detected above ground, between March 1 to September 1. The qualified biologist must utilize a non-lethal survey methodology and obtain appropriate photo vouchers for species confirmation. During the surveys, the biologist must identify inactive small mammal burrows and other potential nest sites with visible flags to reduce the risk of take. Survey results, including negative findings, must be submitted to CDFW applying for appropriate permits. At a minimum, a survey report provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. The map must show surveyor(s) track lines to document that the entire site was covered during field surveys. b) Field survey conditions that include name(s) of qualified biologist(s) and brief qualifications, date and time of survey, survey duration, general weather conditions, survey goals, and species searched. c) Map(s) showing the location of nests/colonies. d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony, if any, is found. A sufficient description of biological conditions, primarily impacted habitat, must include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list	Surveys performed by a qualified entomologist; preparation and submittal of a report by a qualified entomologist to the City that documents the results of the survey	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	separated by vegetation class, density, cover, and abundance of each species).				
MM-BIO-7	If Crotch's bumble bees are detected, the qualified biologist must identify the location of any nests within and adjacent to the Project Site. A 15-meter no disturbance buffer zone must be established around any identified active nest(s) to reduce the risk of disturbance or accidental take. A qualified biologist may expand the buffer zone as necessary to prevent disturbance or take.	Preparation and submittal of a report by a qualified entomologist to the City that documents establishment of the buffer zone to the City	City of Santa Clarita Community Development Department, Planning Division	During construction	
MM-BIO-8	If Crotch's bumble bee is detected and impacts to Crotch's bumble bee cannot be feasibly avoided, the Permittee must consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to California Fish and Game Code Section 2080, et seq). Appropriate authorization from CDFW under the California Endangered Species Act (CESA) may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options (California Fish and Game Code Sections 2080.1, 2081). Early consultation is encouraged, as significant modification to the Project and mitigation techniques may be required to obtain an ITP. The California Fish and Game Code may require that CDFW issue a separate CEQA document before issuing an ITP for the Project unless the Project's CEQA document addresses all Project impacts on CESA endangered, threatened, and/or candidate species.	Issuance of an Incidental Take Permit or Consistency Determination	CDFW	Pre-construction	
MM-BIO-9	Any floral resource associated with Crotch's bumble bee that will be removed or damaged by the Project must be replaced at not less than 1:1. Floral resources must be replaced as close to their original location as feasible. If active Crotch's bumble bee nests are identified and floral resources cannot be replaced	Review and approval of available off-site location and/or preparation and submittal of a	City of Santa Clarita Community Development	Periodic inspections post-construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	within 200 meters of their original location, floral resources must be planted in the most centrally available location relative to identified nests. This location should be not more than 1.5 kilometers from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. These floral resources must be maintained in perpetuity and be replanted and managed as needed to ensure the habitat is preserved.	Maintenance Plan to the City	Department, Planning Division		
CULTURAL RESOURCES					
MM-CR-1	Prior to the start of construction, the Project applicant shall retain a cultural resources principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. This principal investigator shall create a Worker's Environmental Awareness Program (WEAP) pamphlet that shall be provided as training to construction personnel to understand the requirements for the protection of cultural resources. This training shall include examples of archaeological cultural resources to look for and protocols to follow if discoveries are made. The principal investigator shall develop the training and supply any Project-specific supplemental materials necessary to execute the training.	Preparation and submittal of a WEAP pamphlet/training materials by a qualified cultural resources investigator to the City	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	
MM-CR-2	Archaeological resources monitoring shall be conducted by a cultural resources principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, during Project-related earth-disturbing activities pursuant to the California Office of Historic Preservation standards. Monitoring shall entail visual inspection of Project-related earth-disturbing activities (i.e., grubbing and grading, trenching, shoring, mass excavation, footings, utility installation, etc.) on a full-time basis unless the cultural resources principal investigator	Preparation and submittal of a report by a cultural resources investigator to the City that documents ground disturbance	City of Santa Clarita Community Development Department, Planning Division	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	deems that construction monitoring can be conducted on a part-time basis or is no longer required.				
MM-CR-3	If previously unidentified cultural resources are discovered, the cultural resources principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall have the authority to divert or temporarily halt ground-disturbing activities in the area of discovery to allow for evaluation. The principal investigator shall evaluate the find and contact the City of Santa Clarita as soon as possible with recommendations as to the significance and proper treatment of the find. Depending on the nature of the find, the determination of significance may require additional excavation, potentially including the preparation and execution of a Phase II Archaeological Testing Plan. The City of Santa Clarita, acting with the advice of the consulting principal investigator, shall determine the significance and treatment of the discovered resources. If the resources are Native American in origin, then the City of Santa Clarita shall notify consulting tribes and seek their input as to the significance and treatment of the find.	Preparation and submittal of a report by a cultural resources investigator to the City that documents ground disturbance	City of Santa Clarita Community Development Department, Planning Division; Native American tribes	During construction	
MM-CR-4	Avoidance and preservation-in-place are the preferred treatment for both archaeological sites and tribal cultural resources, but avoidance is not always feasible. For significant cultural resources meeting the definition of a historical resource per CEQA Guidelines Section 15064.5(a) or a unique archaeological resource per PRC Section 21083.2(g) as determined by the City of Santa Clarita, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the City of Santa Clarita before being carried out using professional archaeological methods. Before construction activities are allowed to resume in the	Preparation and submittal of a Research Design and Data Recovery Program report by a cultural resources investigator to the City	City of Santa Clarita Community Development Department, Planning Division; Los Angeles County coroner; Native American Heritage Commission	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	affected area, the Data Recovery Program shall be completed to the satisfaction of the City of Santa Clarita. Work may continue on other parts of the Project while consultation and treatment are concluded. If human remains are encountered, work within 50 feet of the discovery shall be suspended, and the City of Santa Clarita shall be contacted immediately. The City of Santa Clarita shall, in turn, contact the Los Angeles County coroner. If the remains are deemed Native American in origin, the coroner shall contact the Native American Heritage Commission, which shall identify a most likely descendant in compliance with PRC Section 5097.98 and CEQA Guidelines Section 15064.5. The most likely descendant shall have up to 48 hours to visit the site and make recommendations as to the treatment and final deposition of the remains. Work may be resumed at the landowner's discretion but shall only commence after consultation and treatment have been concluded to the satisfaction of the City of Santa Clarita. Work may continue on other parts of the Project Site while consultation and treatment are conducted.				
MM-CR-5	All archaeological resources collected during the course of Project construction (including those collected during the Phase I Investigation and other pre-Project identification efforts) shall be taken to a properly equipped archaeological laboratory, where they shall be cleaned, analyzed, and prepared for curation. At a minimum, and unless otherwise specified in any treatment plans prepared for the Project, all resources shall be identified, analyzed, catalogued, photographed, and labeled. At the close of the Project, the collection shall be donated to a public institution with a research interest in the materials and the capacity to care for the materials in perpetuity. Accompanying notes, maps, and photographs shall also be filed at the repository, as	Preparation and submittal of a final report documenting the monitoring, collection, lab work, and analysis by a qualified archaeologist to the City Documentation of donation of the	City of Santa Clarita Community Development Department, Planning Division	During construction and post-construction	

Table 4-1
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	appropriate. The cost of curation is assessed by the repository and is the responsibility of the Project applicant. At the conclusion of monitoring and laboratory work, a final report shall be prepared describing the results of the cultural mitigation monitoring efforts. The report shall include a summary of the field and laboratory methods, an overview of the cultural background of the Project vicinity, a catalog of cultural resources recovered, an analysis of cultural resources recovered and their scientific significance, and recommendations. A copy of the report shall also be submitted to the designated museum repository (if applicable).	collection to a public institution			
GEOLOGY AND SOILS					
PDF-GEO-1	Site earthwork for the Project will be performed in accordance with the recommendations in the Geotechnical Investigation related to site preparation, removal and recompaction, temporary stability of excavations, fill placement and compaction, and trench backfill and compaction. Recommendations include, but are not limited to, the following: • Compressible materials within areas planned to support the proposed building structures will be excavated to competent material and replaced with compacted fill soils. • Excavations over 5 feet will be slot-cut, shored, or cut to a 1:1 slope gradient. Surface water will be diverted away from the exposed cut and not be allowed to pond on top of the excavations. • Areas prepared to receive structural fill and/or other surface improvements will be scarified to a minimum depth of 6 inches, brought to at least	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	

Table 4-1
Mitigation Monitoring and Reporting Program

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	optimum moisture content, and recompacted to at least 90 percent relative compaction. • Trench backfill will be compacted in uniform lifts (generally not exceeding 8 inches in compacted thickness) by mechanical means to at least 90 percent relative compaction. • The western portion of the ridge will have a debris fence for slope stability, to catch the cobbles and boulders that may dislodge from the slope.				
PDF-GEO-2	Foundation design and construction for the Project will adhere to the recommendations in the Geotechnical Investigation. Upon design finalization, the Geotechnical Consultant will review and verify structural loads for the proposed buildings. The proposed buildings will utilize the recommended foundations: conventional foundations, post-tension foundations, or mat slabs. The proposed bridge will adhere to the preliminary recommendations for deepened foundations.	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	
PDF-GEO-3	If retaining walls are implemented as part of the Project, they will be backfilled with low expansive soils if no on-site soils fit the required minimum parameters. Embedded structural walls will be designed to withstand the lateral earth pressures. All retaining wall structures will be provided with appropriate drainage and appropriately waterproofed. Shallow foundations recommendations and bearing capacities will be designed per the Geotechnical Investigation.	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	
PDF-GEO-4	Pavement used for construction of the Project will adhere to the recommendations of the Geotechnical Investigation for minimum pavement sections. Final pavement sections will be confirmed by the Project civil engineer based upon the	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	Project traffic index and the City of Santa Clarita minimum requirements, as necessary.				
PDF-GEO-5	Concrete in contact with on-site soils will be designed in accordance with the American Concrete Institute Criteria for soils having a negligible sulfate exposure condition. Concrete will be designed in accordance with the minimum guidelines outlined in the Geotechnical Report for minimum thickness, pre-saturation, reinforcement, crack control, and subgrade compaction.	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	
PDF-GEO-6	The proposed structures will have positive drainage of surface water that flows away from the structures. Positive drainage may be accomplished by providing drainage away from buildings at a gradient of at least 2 percent for a distance of at least 5 feet, and further maintained by a swale or drainage path at a gradient of at least 1 percent. Where necessary, drainage paths may be shortened by use of area drains and collector pipes.	Issuance of a grading permit	City of Santa Clarita Building and Safety Division	Pre-construction	
PDF-GEO-7	During construction, the interpolated subsurface conditions will be checked in the field by the Geotechnical Consultant. The Geotechnical Consultant will also perform observation and testing during future grading, excavations, backfill of utility trenches, preparation of pavement subgrade and placement of aggregate base, foundation or retaining wall construction, or when an unusual soil condition is encountered at the Project Site. The Geotechnical Consultant will review grading plans, foundation plans, and final Project drawings prior to construction.	Preparation and submittal of a report by the Geotechnical Consultant to the City verifying field check; issuance of a grading permit	City of Santa Clarita Building and Safety Division	During construction; pre-construction	
MM-GEO-1	Prior to the start of construction, the Project applicant shall retain a qualified professional paleontologist as defined by Society for Vertebrate Paleontology (SVP) (2010)	Preparation and submittal of a WEAP by a	City of Santa Clarita Community	Pre-construction	

Table 4-1
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Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	standards. The paleontologist shall create a Worker's Environmental Awareness Program pamphlet that shall be provided as training to construction personnel to understand regulatory requirements for the protection of paleontological resources. The training class(es) shall include examples of paleontological resources to look for and protocols to follow if discoveries are made. The paleontologist shall develop Project-specific training and supply any supplemental materials necessary to execute the training.	qualified paleontologist to the City	Development Department, Planning Division		
MM-GEO-2	Paleontological resources monitoring shall be conducted under the guidance of the qualified professional paleontologist and by a qualified paleontological resource monitor(s) as defined by SVP (2010) standards. Monitoring shall entail the visual inspection of excavated or graded area and trench sidewalls. The monitor shall have the authority to temporarily halt or divert construction equipment in order to investigate and salvage finds. The paleontological monitor shall have the authority to take sediment samples and test for microfossils at the discretion of the qualified professional paleontologist. If no significant fossils have been exposed or the qualified professional paleontologist has otherwise found that the scientific value of the resource has been exhausted, the qualified professional paleontologist may determine that full-time monitoring is no longer necessary or, with the approval of the City, may reduce or eliminate monitoring.	Preparation and submittal of a report by a qualified paleontologist and qualified paleontological resource monitor(s) to the City that documents ground disturbance	City of Santa Clarita Community Development Department, Planning Division	During construction	
MM-GEO-3	In the event that a paleontological resource is encountered when a monitor is not on-site or a potentially significant resource is encountered that requires additional investigation or cannot be quickly salvaged by the paleontological monitor, all construction shall cease within 50 feet of the discovery and the qualified professional paleontologist shall be notified immediately. If the monitor is	Preparation and submittal of a Paleontological Testing Plan by a qualified paleontologist and qualified	City of Santa Clarita Community Development Department, Planning Division	During construction	

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	present at the time of discovery, then the monitor shall have the authority to temporarily divert the construction equipment around the find and notify the qualified professional paleontologist. The qualified professional paleontologist shall then visit the site and assess the resource for its scientific significance. Project excavations shall continue elsewhere, monitored by a paleontological resource monitor. The qualified professional paleontologist shall evaluate the find and contact the City as soon as possible with recommendations as to the significance and potential treatment of the find. Depending on the nature of the find, the determination of significance may require additional excavation, potentially including the preparation and execution of a Paleontological Testing Plan. If significant, depending on the nature of the resource, treatment shall require the preparation and execution of a Paleontological Treatment Plan. The City, acting with the advice of the qualified professional paleontologist, shall determine the significance and treatment of the discovered resources.	paleontological resource monitor(s) to the City			
MM-GEO-4	All significant fossils collected shall be prepared in a properly equipped paleontology laboratory to a point ready for permanent curation. Preparation shall include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Any fossils encountered and recovered shall be prepared to the point of identification. Following the initial laboratory work, all fossil specimens shall be identified to the lowest taxonomic level, analyzed, photographed, and catalogued, before being delivered to an accredited local museum repository for permanent curation and storage.	Preparation and submittal of a report of the paleontological mitigation monitoring efforts by a qualified paleontologist to the City	City of Santa Clarita Community Development Department, Planning Division	Post-construction	
MM-GEO-5	At the conclusion of laboratory work and preparation for museum curation, a final report shall be prepared describing	Preparation and submittal of a	City of Santa Clarita	Post-construction	

Table 4-1
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	the results of the paleontological mitigation monitoring efforts associated with the Project. The report shall be prepared for the lead agency and the Project applicant. The report shall include a summary of the field and laboratory methods, an overview of the geology and paleontology in the Project vicinity, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository. Accompanying notes, maps, and photographs shall also be filed at the repository. The cost of curation is assessed by the repository and is the responsibility of the Project applicant.	report of the paleontological mitigation monitoring efforts by a qualified paleontologist	Community Development Department, Planning Division		
GREENHOUSE GAS EMISSIONS					
PDF-GHG-1	Subject to City and other agency approvals, rooftop photovoltaic (PV) systems and solar panels will be installed for all the sound stage buildings and the support building for localized use.	Issuance of a building permit	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	
PUBLIC SERVICES					
PDF-PUB-1	All buildings shall be accessible to LACoFD apparatus by way of access roadways, with an all-weather surface of not less than 28 feet in width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route along the exterior of the building. The roadway shall provide approved signs and/or striping stating “No Parking – Fire Lane” and shall be maintained in accordance with the Los Angeles County Fire Code.	Issuance of a building permit	City of Santa Clarita Community Development Department, Planning Division; LACoFD	Pre-construction	

Table 4-1
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PDF-PUB-2	A 12-foot-tall security fence primarily made of woodcrete would be installed along the majority of the perimeter of the Project Site and open rail wrought-iron fencing would be installed along the southwestern corner of the Project Site, adjacent to the proposed office building.	Issuance of a building permit	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	
PDF-PUB-3	Closed-circuit television security cameras would be installed throughout the Project Site that would be monitored full-time at a manned security station on-site.	Issuance of a Certificate of Occupancy	City of Santa Clarita Community Development Department, Planning Division	Prior to occupancy and operation	
PDF-PUB-4	Licensed security personnel would be provided to patrol the Project Site at all times (i.e., 24 hours per day, seven days per week). Additional stage security would also be provided at key entry points to and within individual building areas.	Issuance of a Certificate of Occupancy	City of Santa Clarita Community Development Department, Planning Division	Prior to occupancy and operation	
TRANSPORTATION					
PDF-TA-1	The Project will incorporate several Transportation Demand Measures (TDM) features to contribute to the reduction in VMT and vehicle trips to and from the Project Site. These actions are consistent with City and State of California transportation and GHG policies and objectives. The following measures will be incorporated into the Project to reduce VMT and vehicle trips: • Flexible work schedules and telecommuting programs • Bicycle amenities (bicycle racks, lockers, showers, etc.)	Issuance of a Certificate of Occupancy	City of Santa Clarita Community Development Department, Planning Division	Prior to occupancy and operation	

Table 4-1
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	• Carpool programs and support • Tenant-based guaranteed ride home (GRH) program • Flex car support • Preferential parking locations for high-occupancy vehicles • TDM promotions and marketing • Pedestrian network improvements • On-street bicycle facilities • Bicycle parking per Santa Clarita Unified Development Code				
TRIBAL CULTURAL RESOURCES					
MM-TCR-1	In conjunction with Mitigation Measure MM CR-1, prior to the start of construction, a qualified representative of the Fernandeño Tataviam Band of Mission Indians shall be retained to conduct a Tribal Cultural Resources Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the aspects of Tribal Cultural Resources and the procedures for notifying the Fernandeño Tataviam Band of Mission Indians should Tribal Cultural Resources be discovered.	Preparation and submittal of documentation to the City that documents a Tribal Cultural Resources WEAP was conducted by a Fernandeño Tataviam Band of Mission Indians representative (Native American Monitor)	City of Santa Clarita Community Development Department, Planning Division; Fernandeño Tataviam Band of Mission Indians	Pre-construction	
MM-TCR-2	The Project applicant shall retain a professional Native American monitor procured by the Fernandeño Tataviam Band of Mission Indians to observe all soil disturbing activities, such as site clearance and grubbing, grading, and	Preparation and submittal of a report that documents	City of Santa Clarita Community Development	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	excavation. The Fernandeño Tataviam Band of Mission Indians shall assign a Native American monitor to each grading or other earthwork machine engaged in ground disturbing activity that is active more than 100 feet from any other grading or other earthwork machine. If tribal cultural resources are encountered, the Native American monitor shall have the authority to request that ground-disturbing activities cease within 60 feet of discovery to assess and document potential finds in real time.	monitoring by a Native American representative during ground disturbance	Department, Planning Division; Fernandeño Tataviam Band of Mission Indians		
MM-TCR-3	In the event that tribal cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease, and a cultural resources principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall assess the find. The principal investigator and tribal monitor shall have the authority to request ground-disturbing activities cease within the area of a discovery. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Consultation between the Fernandeño Tataviam Band of Mission Indians tribal monitor and lead agency shall occur to determine further action required for any inadvertent discoveries of tribal cultural resources. Depending on the nature of the find, the determination of significance may require additional excavation, potentially including the preparation and execution of a Phase II Archaeological Testing Plan. The City of Santa Clarita, acting with the advice of the consulting principal investigator and the Fernandeño Tataviam Band of Mission Indians, shall determine the significance and treatment of the discovered resources.	Preparation and submittal of a Phase II Archaeological Testing Plan by a qualified cultural resources principal investigator and Native American monitor to the City	City of Santa Clarita Community Development Department, Planning Division; Fernandeño Tataviam Band of Mission Indians	During construction	
MM-TCR-4	Prior to the disposition of any inadvertent discovery of tribal cultural resources, the Fernandeño Tataviam Band of	Consultation with the Fernandeño	City of Santa Clarita	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	Mission Indians shall be consulted on the treatment and reburial location of the tribal cultural resources. The Fernandeño Tataviam Band of Mission Indians shall be given first right of refusal for the treatment, disposition, and possible collection/caretaking of tribal cultural resources. The Fernandeño Tataviam Band of Mission Indians consider collection as a last resort and prefer tribal cultural resources either remain in-situ, or if required, be reburied.	Tataviam Band of Mission Indians	Community Development Department, Planning Division; Fernandeño Tataviam Band of Mission Indians		
MM-TCR-5	Prior to the disposition of any materials suspected to be indicative of a midden, a cultural resources principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, and the Fernandeño Tataviam Band of Mission Indians archaeologist shall assess the find and confirm whether it is funerary in nature. Once confirmed it is not suspected to be funerary-associated, the midden shall be left in-situ whenever possible. If it is not possible to leave the midden in-situ, the Fernandeño Tataviam Band of Mission Indians shall be consulted for a treatment plan.	Preparation and submittal of a report that documents the assessment of the find by a qualified cultural resources principal investigator and Native American monitor to the City	City of Santa Clarita Community Development Department, Planning Division; Fernandeño Tataviam Band of Mission Indians	During construction	
MM-TCR-6	If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5, which shall be enforced for the duration of the Project. Should the find be determined as Native American in origin, the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), shall be notified and consulted to provide recommendations to the landowner for the treatment of the human remains. However, pursuant to PRC Section 5097, the ultimate decision regarding the subsequent disposition of those	Preparation and submittal of a report that documents the assessment of human remains by a qualified cultural resources principal investigator and Native American monitor to the City	City of Santa Clarita Community Development Department, Planning Division; Los Angeles County coroner; Native American Heritage Commission	During construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	discoveries shall be made by the landowner and the City of Santa Clarita.				
MM-TCR-7	A copy of any and all archaeological documents created as a part of the Project (isolate records, site records, survey reports, testing reports, and monitoring reports) shall be provided to the Fernandeño Tataviam Band of Mission Indians.	Preparation and submittal of documentation that all archaeological documents have been provided to the Fernandeño Tataviam Band of Mission Indians to the City	City of Santa Clarita Community Development Department, Planning Division; Fernandeño Tataviam Band of Mission Indians	Post-construction	
WILDFIRE					
PDF-WF-1	Prior to commencement of construction activities, a Construction Fire Prevention Plan will be prepared for the Project to specify the construction phase restrictions and fire safety requirements that would be implemented to reduce risk of ignitions and pre-plans for responding to an unlikely ignition.	Preparation and submittal of a Construction Fire Prevention Plan to the City and issuance of a grading permit	City of Santa Clarita Community Development Department, Planning Division	Pre-construction	
PDF-WF-2	Prior to bringing lumber or combustible materials onto the Project Site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones (FMZs) established.	Issuance of a building permit	City of Santa Clarita Building and Safety Division	During construction	
PDF-WF-3	The property owner and/or property management agency will implement a Wildfire Education Program on-site and formally adopt, practice, and implement a “Ready, Set, Go!”	Preparation and submittal of report documenting the	City of Santa Clarita Community	Prior to issuance of a	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure/Project Design Feature No.	Mitigation Measure	Method of Review Verification	Responsible Agency	Timing	Status of Implementation
	approach to evacuation. Project occupants will be provided with ongoing education regarding wildfires and the Project Site's FPP requirements. The educational information must include maintaining the landscape and structural components according to the appropriate standards designed for the Project. Educational materials can include but are not limited to informational handouts, website page, mailers, fire-safe council participation, inspections, and seasonal reminders to disseminate wildfire and relocation awareness information. The LACoFD will review and approve all wildfire educational material/programs before printing and distribution.	Project's Wildfire Education Program to the City; issuance of a certificate of occupancy and LACoFD approval	Development Department, Planning Division; LACoFD	certificate of occupancy	
PDF-WF-4	Fuel modification area vegetation management within the FMZs will be completed annually by May 1 of each year and more often as needed for fire safety, as determined by the LACoFD. Maintenance and inspections of the FMZs would be managed by the property owner and/or property management agency and occur as needed. The property owner and/or property management agency will hire a LACoFD-approved FMZ inspector to provide annual certification that it meets the requirements of the Project Site's FPP.	LACoFD approval of the FPP and FMZ	Development Department, Planning Division; LACoFD	Prior to issuance of a certificate of occupancy	

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ATTACHMENT 1

OTHER COMMENTS SUBMITTED DURING THE DRAFT EIR COMMENT PERIOD

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Letters Requesting Extension of the Draft EIR Comment Period

This section of **Attachment 1** to this Final EIR contains letters that requested an extension of the Draft EIR public review period but did not provide any comments on the adequacy of the EIR. With regard to public review, the City has provided the following public review periods and opportunities for public input during the Shadowbox Studios EIR process:

- Publication and distribution of a Notice of Preparation (NOP) on March 28, 2022, notifying interested agencies, organizations, and persons that the City would be preparing an EIR for the Project and inviting comments on the scope and content of the EIR. The public review period for the NOP was from March 29, 2022, to April 28, 2022.
- Public scoping meeting held on April 21, 2022, at which the City accepted comments on the scope and content of the EIR.
- Publication and distribution of a Notice of Completion and a Notice of Availability of the Draft EIR on April 6, 2023, which notified interested agencies, organization, and persons that the City was accepting comments on the Draft EIR. The public review period for the Draft EIR began on April 6, 2023, and ended on May 22, 2023.
- Three Planning Commission meetings held on April 18, 2023, May 16, 2023, and June 20, 2023, to solicit comments from the public and the Planning Commission on the Draft EIR.

The public review process undertaken by the City for the Draft EIR fully complies with all requirements of CEQA and the CEQA Guidelines. Given the above, and based on direction provided by the City's Planning Commission, the Draft EIR review period was not extended.

As these comments do not address the adequacy of the Draft EIR, no additional response is required. However, these letters are included in the record and forwarded to the decision-makers for consideration.

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ADAMSKI MOROSKI MADDEN CUMBERLAND & GREEN LLP

ATTORNEYS AT LAW

Post Office Box 3835 • San Luis Obispo, California 93403-3835
T 805-543-0990 • F 805-543-0980 • *www.ammcglaw.com*

April 19, 2023

Joseph Michael Montes, Esq. **VIA EMAIL**
City Attorney for City of Santa Clarita
Burke Williams & Sorensen LLP
444 S. Flower Street, Suite 2400
Los Angeles, CA 90071-2953
jmontes@bwslaw.com

Re: Master Case Number 21-109
Request for Extension of Time to Comment or Otherwise Respond to the Draft EIR

Joe:

I hope this finds you well. My firm has been retained by the Placerita Canyon Property Owners Association ("PCPOA") to represent their interests concerning the proposed Shadowbox Studios Project. My partner, Ty Green, and myself will be working on this matter. Ty's email address is: Green@ammcglaw.com; my email address is: JeffH@ammcglaw.com.

We understand that comments to the draft EIR are due on or before May 22, 2023. I am assuming you are aware of not only the enormity of the project but the voluminous nature of the report, over 500 pages with over 5,000 pages of appendices. It is not feasible for PCPOA to be able to substantively respond to all the draft's details by that date.

PCPOA requests a minimum of an additional 15 days upon which to comment and present substantive responses to the Draft EIR. Moreover, we believe that, given the scope and complexity of this project, special circumstances exist to exceed the 60-day maximum review period. We therefore request that the review period be extended to allow for a total comment period of 90 days. We would appreciate your response as soon as possible given the looming deadline. Ty and I look forward to working with you and City Staff. Please feel free to contact me should you have any questions.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

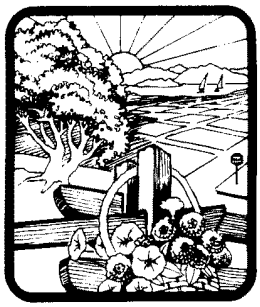
/s/ Jeff Hacker

JEFFREY A. HACKER

JAH:tlg
j:\clients\placerita canyon poa\corr\ltr to montes 4.19.23 re ext re draft eir.docx

cc: Erika Iverson, Planner, EIverson@Santa-Clarita.com
Patrick LeClair, Director of Planning, PLeClair@Santa-Clarita.com
Client

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY
AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386
www.scope.org



5-1-23

Erika Iverson, Planning
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Sent via email to eiverson@santa-clarita.com

Re: Newhall Studio Project 21-109 Request for an extension to review the EIR
Please copy to all members of the Planning Commission

Dear Ms. Iverson and Planning Commission Members

SCOPE is a planning and conservation non-profit group now celebrating its 35th year of work in the Santa Clarita Valley.

This project proposes to build a huge industrial development on an area of floodplain currently zoned for housing. It will fundamentally change the character of the Newhall neighborhood and old town district which the City has strived to create and which the City has spent enormous amounts of public funds to promote. It will destroy a number of oaks including the iconic heritage oak located in the middle of this flood plain which is older than the town of Newhall itself.

The EIR was released just prior to the Easter and Passover holidays when many people had their minds on family and religious celebrations and thus may not have been aware of its release. It is also a massive document requiring a great deal of reading and research.

Due to all of these factors and the importance of widespread community involvement on a project that will so dramatically change the character of an existing neighborhood, we request that you extend the comment period to at least 120 days for this document.

It is vitally important that you receive input from a wide variety of community members on this project and that community members have adequate time to provide you with a full array of information to help you make the best decision for our community.

Thank you for your consideration of this matter.

Sincerely,

Lynne Plambeck,

President

From: Erika Iverson
To: Lisa Howe
Subject: FW: Stusio Project 21-109
Date: Monday, May 8, 2023 7:46:19 AM

From: Dan G <dgfxdgfx@hotmail.com>
Sent: Monday, May 8, 2023 6:09 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

From: Erika Iverson
To: Lisa Howe
Subject: FW: Stusio Project 21-109
Date: Tuesday, May 9, 2023 7:51:06 AM

-----Original Message-----
From: Lisa <luvntreez@yahoo.com>
Sent: Monday, May 8, 2023 10:59 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.

Please copy to all planning commissioners.

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 10, 2023 7:48 AM
To: Lisa Howe
Subject: FW: Studio Project 21-109

From: Cher Gilmore <chergilmore@sbcglobal.net>
Sent: Tuesday, May 9, 2023 11:18 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Studio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

To the Planning Commission:

Please require the developer for this project to change the plan in order to save the heritage oak and other oaks on this property (12 oaks total). Old growth trees are our best tool for slowing down climate change because they absorb so much CO2 -- far more than newly planted trees, which take about 10 years to even BEGIN absorbing carbon. How can we even *think* of chopping down these magnificent and crucial natural wonders? And for what? Another building?

This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.

Also, please copy this message to all planning commissioners.

Thank you,

Cher Gilmore

26834 Circle of the Oaks
Santa Clarita, CA 91321
661-251-1718

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
rfranco@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 12, 2023

VIA EMAIL AND OVERNIGHT MAIL

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
Santa Clarita, CA 91335
mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents

Dear Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to respectfully request that the City of Santa Clarita ("City") extend by at least 30 days the public review and comment period for the Draft Environmental Impact Report ("DEIR") prepared for the Shadowbox Studios Project (Master Case 21-109) ("Project"), which currently ends on May 22, 2023.

We are requesting an extension due to the City's failure to provide timely access to all documents referenced in the DEIR. We ask that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its

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air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

On April 27, 2023, our office submitted a request, pursuant to the California Environmental Quality Act ("CEQA"),[1] for immediate access to any and all *documents referenced or relied upon in the Draft Environmental Impact Report*, excluding the DEIR, its appendices and documents available on the City of Santa Clarita website as of that date.[2] CEQA's section 21092(b)(1) and CEQA Guidelines section 15087(c)(5) require that "all documents referenced" and "all documents incorporated by reference" in an environmental impact report shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[3]

On May 8, 2023, the City responded that it was "in receipt of your public records request," and that because the request involved numerous separate and distinct records, the City claimed an extension pursuant to Government Code section 7922.535(b) to provide the missing documents. The City stated that "pursuant to the extension provision, you will be contacted on or before May 22, 2023, with the availability of the records responsive and appropriate for disclosure."

As an initial matter, our April 27, 2023 request was made pursuant to the provisions of CEQA, not the California Public Records Act.[4] Therefore, the extension provision cited by the City (Government Code section 7922.535(b)) is inapplicable.

Moreover, CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[5] The courts have held that the failure to provide even a few pages

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[1] Pub. Resources Code §§ 21000 *et seq*.
[2] Letter to Jason Crawford and Erika Iverson, City of Santa Clarita from Sheila Sannadan, Adams Broadwell Joseph & Cardozo re: Request for Immediate Access to Documents Referenced in the Draft Environmental Impact Report – Shadowbox Studios Project (Master Case 21-109) (April 27, 2023).
[3] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5).
[4] Government Code §§ 7920.000, *et seq*.
[5] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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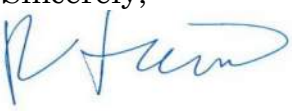
of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[6] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[7]

By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City is depriving members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project and is violating the procedural mandates of CEQA. The City's suggestion that it will not make documents referenced in the DEIR available for our review until May 22, 2023—the last day to submit comments on the Project—plainly violates CEQA and would preclude any meaningful public review and comment. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR by at least 30 days from the date on which the City releases ***all*** the DEIR reference documents for public review.

Given the short time before the current public review and comment period ends, please contact me as soon as possible with your response to this request, but no later than close of business on **Monday, May 15, 2023**. Thank you for your consideration and prompt response to this request.

Sincerely,



Richard M. Franco

RMF:acp

[6] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[7] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

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ADAMSKI MOROSKI MADDEN CUMBERLAND & GREEN LLP

ATTORNEYS AT LAW

Post Office Box 3835 • San Luis Obispo, California 93403-3835
T 805-543-0990 • F 805-543-0980 • *www.ammcglaw.com*

May 8, 2023

Joseph Michael Montes, Esq. **VIA EMAIL**
City Attorney for City of Santa Clarita
Burke Williams & Sorensen LLP
444 S. Flower Street, Suite 2400
Los Angeles, CA 90071-2953
jmontes@bwslaw.com

Re: Master Case Number 21-109
Request for Extension of Time to Comment or Otherwise Respond to the Draft EIR
Follow-up on Public Records Request

Joe:

I am following up on two interrelated matters. On April 19, 2023, I transmitted correspondence to you requesting additional time to respond to the EIR for this project. At or about the same time, I also requested specific materials from the city pursuant to the City's on-line public records request. More than 10 days have elapsed since the date of my on-line public records request. There has been no response from the city to either of my requests. Our ability to meaningfully comment on the EIR is compromised by not having the public documents requested. Please confirm two items: 1) whether the request for additional time to respond to the EIR has been granted and if not, why not; and 2) when can we expect to receive the requested documents together with any associated costs. Thank you.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

/s/ Jeff Hacker

JEFFREY A. HACKER

JAH:tlg
j:\clients\placerita canyon poa\corr\ltr to montes 5.8.23 re records & ext.docx

cc: Erika Iverson, Planner, EIverson@Santa-Clarita.com
Patrick LeClair, Director of Planning, PLeClair@Santa-Clarita.com
Client

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 12:25 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Liz Lyons <liz.lyonsphd@gmail.com>
Sent: Monday, May 15, 2023 12:22 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

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Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Sincerely,

Liz Lyons

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 3:35 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

-----Original Message-----
From: Randy Martin <drrandymartin@gmail.com>
Sent: Monday, May 15, 2023 1:54 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

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Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Please do not move or remove this tree. Our natural heritage is very important.

Dr. Randy Martin, OMD
23812 Spinnaker Court
Valencia, CA 91355

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 3:36 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Jessi Vannatta <jessivannatta1@hotmail.com>
Sent: Monday, May 15, 2023 12:53 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Hello,

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Thank you for your consideration.

Jessi

Jessi Vannatta
[she/her/hers/ella]
931-607-8024

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

May 15, 2023

Erika Iverson, Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
Em: Eiverson@santa-clarita.com

RE: City of Santa Clarita's Shadowbox Studios Project (Master Case 21-109) SCH# 2022030762

Dear Erika Iverson,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments for the City of Santa Clarita's ("**City**") May 16, 2023, Planning Commission Meeting for the Shadowbox Studios Project ("**Project**").

The Southwest Carpenters is a labor union representing over 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225

Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and

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[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

construction sites have been identified as sources of community spread of COVID-19.[5]

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

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[6] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

[7] For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

The City should require the Project to be built using a workforce trained in ICRA protocols.

Sincerely,

Jason A. Cohen
Attorneys for Southwest Mountain States
Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
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Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Mininum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4103	1.4103
2	**12-1-2021**	**2-28-2022**	1.3613	1.3613
3	**3-1-2022**	**5-31-2022**	1.1985	1.1985
4	**6-1-2022**	**8-31-2022**	1.1921	1.1921
5	**9-1-2022**	**11-30-2022**	1.1918	1.1918
6	**12-1-2022**	**2-28-2023**	1.0774	1.0774
7	**3-1-2023**	**5-31-2023**	1.0320	1.0320
8	**6-1-2023**	**8-31-2023**	1.0260	1.0260

9	**9-1-2023**	**11-30-2023**	1.0265	1.0265
10	**12-1-2023**	**2-29-2024**	2.8857	2.8857
11	**3-1-2024**	**5-31-2024**	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4091	1.4091
2	**12-1-2021**	**2-28-2022**	1.3329	1.3329
3	**3-1-2022**	**5-31-2022**	1.1499	1.1499
4	**6-1-2022**	**8-31-2022**	1.1457	1.1457
5	**9-1-2022**	**11-30-2022**	1.1415	1.1415
6	**12-1-2022**	**2-28-2023**	1.0278	1.0278
7	**3-1-2023**	**5-31-2023**	0.9868	0.9868
8	**6-1-2023**	**8-31-2023**	0.9831	0.9831

9	**9-1-2023**	**11-30-2023**	0.9798	0.9798
10	**12-1-2023**	**2-29-2024**	2.8757	2.8757
11	**3-1-2024**	**5-31-2024**	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

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Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

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Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

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Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

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Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:20 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

-----Original Message-----
From: Cindy Hazard <whiteface5287@yahoo.com>
Sent: Monday, May 15, 2023 6:38 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:21 AM
To: Lisa Howe
Subject: FW: Studio Project 21-109

-----Original Message-----
From: Shana Stage <stagefrit@aol.com>
Sent: Monday, May 15, 2023 8:17 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Studio Project 21-109

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Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 10:32 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Angela Moskow <amoskow@californiaoaks.org>
Sent: Tuesday, May 16, 2023 10:12 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Janet Cobb <jcobb@californiawildlifefoundation.org>
Subject: Stusio Project 21-109

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Best,

Janet Cobb (Executive Officer of California Wildlife Foundation/California Oaks, cced above) and Angela Moskow

Angela Moskow
California Oaks Information Network Manager
California Wildlife Foundation/California Oaks
201 University Avenue

Berth H-43
Berkeley, CA 94710
www.californiaoaks.org
Telephone: (510) 763-0282

Lisa Howe

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Please copy to all planning commissioners.

Best,

Janet Cobb (Executive Officer of California Wildlife Foundation/California Oaks, cced above) and Angela Moskow

Angela Moskow
California Oaks Information Network Manager
California Wildlife Foundation/California Oaks
201 University Avenue

Berth H-43
Berkeley, CA 94710
www.californiaoaks.org
Telephone: (510) 763-0282

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
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rfranco@adamsbroadwell.com

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SACRAMENTO, CA 95814-4721
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KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 16, 2023

Via Email and Hand Delivery

Chair Renee Berlin
Members of the Planning Commission
City of Santa Clarita
23920 Valencia Blvd., Suite 140
Santa Clarita, CA 91355

Jason Crawford, Director of
Community Development
Erika Iverson, Associate Planner
City of Santa Clarita
23920 Valencia Blvd., Suite 302
Santa Clarita, CA 91355
Email: Jcrawford@santa-clarita.com; Eiverson@santa-clarita.com

Re: Agenda Item #1- May 16, 2023 Planning Commission Hearing on Shadowbox Studios Project (Master Case 21-109)

Dear Chair Berlin, Honorable Planning Commission members, Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") with respect to the May 17, 2023 Planning Commission Agenda Item #1, the Shadowbox Studios Project (Master Case 21-109) ("Project") proposed by L.A. Railroad 93, LLC ("Applicant"). The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and approximately 37,500-square feet of catering and specialty service areas. The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north.

The staff report for the May 16 hearing recommends that the Planning Commission take the following actions: (1) receive the staff presentation in response to Planning Commission direction; (2) continue the public hearing to receive

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testimony from the applicant and the public; (3) close the public hearing and provide direction to staff on the hearing schedule; and (4) continue the Project to June 20, 2023. For the reasons set forth below, it is premature for the Planning Commission to act on the Project or to set dates for decisional hearings because the public comment period on the Project's Draft Environmental Impact Report ("DEIR") remains open, and the City must review and respond to comments on the DEIR before moving forward with any Project approval actions. CREED LA respectfully requests that the Planning Commission direct City staff to extend the public comment period for the Project's Draft Environmental Impact Report ("DEIR") and continue the public hearing to a date after the close of public comment on the DEIR.

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the City of Los Angeles.

Individual members of CREED LA and its member organizations live, work, recreate, and raise their families in the City of Santa Clarita and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist onsite.

In addition, CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

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II. THE PLANNING COMMISSION SHOULD CONTINUE THE HEARING AND EXTEND THE PUBLIC COMMENT PERIOD ON THE DEIR DUE TO FAILURE TO COMPLY WITH CEQA

CREED LA is in the process of reviewing the Project's DEIR with its experts and plans to submit legal and technical comments prior to the close of the public comment period, which currently ends on May 22, 2023. Based on our review of the DEIR and available supporting documents, it appears that the DEIR fails to comply with the requirements of the California Environmental Quality Act[1] ("CEQA") as it fails to disclose, analyze and mitigate all of the Project's potentially significant impacts, including impacts on air quality, greenhouse gas emissions, biological resources, noise, and transportation.

Any Planning Commission action on the Project, including the proposed recommendations to close the public hearing and set dates for decisional hearings, is premature at this time because the public comment period on the DEIR remains open. CREED LA and other members of the public have yet to provide substantive comments on the DEIR, and the City must review and address those comments before closing public comment and conducting Project approval hearings.[2] Revision and recirculation of the DEIR may also be required prior to release of a Final EIR and any hearings on the Project.[3] Accordingly, CREED LA respectfully requests that the Planning Commission defer any action on the Project and continue the public hearing to a date after the close of public comment on the DEIR.

In addition, we request that the City extend the public review and comment period for the DEIR on the grounds that the City failed to make available all of the documents referenced in and relied upon by the DEIR during the entire public comment period, in violation of CEQA. We first submitted a request for access to such documents pursuant to CEQA on April 27, 2023.[4] On May 8, the City responded that "you will be contacted on or before May 22, 2023 [i.e., the last day to submit public comments on the DEIR], with the availability of the records responsive and appropriate for disclosure."

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[1] Pub. Resources Code, §§ 21000 et seq.; 14 Cal. Code Regs. ("C.C.R") §§ 15000 et seq.
[2] 14 C.C.R. § 15088 (b) (written responses to public comments on a DEIR must include disposition of significant environmental issues raised in comments, including any revisions to the proposed project to mitigate anticipated impacts or objections).
[3] Pub. Resources Code § 21092.1; 14 C.C.R. § 15088.5.
[4] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Immediate Access to Documents Referenced or Relied Upon in the Draft Environmental Impact Report-Shadowbox Studios Project.

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On May 12, 2023, we requested that the City extend the public comment period as the City had not provided access to all of the DEIR reference documents.[5] We reiterate that request here, and note that there are at least two additional pending requests for an extension of the DEIR comment period.[6] CREED LA's request is made pursuant to CEQA, which requires that "all documents referenced in the draft environmental impact report or negative declaration" be available for review and "readily accessible" during the entire comment period.[7]

Our May 12 request for extension of time included a demand that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

Without access to these critical DEIR reference documents during the entire public comment period, CREED LA and other members of the public have been precluded from having a meaningful opportunity to comment on the DEIR as required by CEQA. Without access to these documents, CREED LA and other members of the public have been unable to evaluate the accuracy of the City's impact analysis, or the efficacy of the City's proposed mitigation measures.

CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[8] The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional

---

[5] May 12, 2023 letter from Richard M. Franco, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project.
[6] City of Santa Clarita Planning Commission Agenda Report, pg. 14.
[7] PRC §§ 21092(b)(1) (emphasis added); 14 Cal. Code Regs. ("CCR") § 15087(c)(5).
[8] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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public comment.[9] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[10]

On May 15, 2023, the City produced a number of the DEIR reference documents requested, with only a week remaining in the DEIR public comment period. This belated production deprived CREED LA of timely access to the documents, and does not cure the City's failure to make these documents available during the entire public comment period. By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City has denied CREED LA and members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project in violation of CEQA's procedural mandates. Even with the belated document production, the size of the DEIR and the Project's complexity make it difficult to effectively review and comment on the DEIR by the current comment deadline of May 22, 2023. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR to at least June 14, 2023, which is 30 days after the date on which the City released the missing DEIR reference documents for public review.

Finally, we note that CREED LA did not receive formal notice of the May 16, 2023 Planning Commission hearing, despite our express written request for such notice. On April 27, 2023, we sent a letter via email and U.S. Mail to the City Clerk and the Director of Community Development requesting "**mailed notice of any and all hearings, meetings and/or actions related to the Project.** [emphasis in original]"[11] The letter noted that these requests were made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108, 21152, and 21167(f), and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. We only learned of the May 16 hearing by chance, in an email by Director Crawford in response to our May 12 letter requesting an extension of the DEIR public comment period. We hereby reiterate our request for mailed and emailed notice of any and all hearings, meetings and/or actions related to the Project.

---

[9] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[10] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
[11] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Mailed Notice of Actions and Hearings Related to Shadowbox Studios Project.

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III. CONCLUSION

For the foregoing reasons, CREED LA requests that the Planning Commission defer any consideration of the Project and the DEIR, extend the DEIR public review and comment period, and continue the public hearing to a date after the close of the public review and comment period.

Thank you for your consideration of these comments.

Sincerely,

Richard M. Franco

RMF:acp

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 11:35 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Kubler, Janet E <janet.kubler@csun.edu>
Sent: Tuesday, May 16, 2023 11:30 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

I am a local citizen who came to this community to raise my children because of the quality of life here. Please do more to protect the natural heritage and beauty of the Santa Clarita Valley. Heritage Oaks cannot be purchased or replaced. They can only be protected to have them in the future.

Sincerely,
Janet Kubler

Janet E. Kübler, Ph.D.
Biology Department
CSUN
18111 Nordhoff Street
Northridge, CA 91330-8303

California Seaweed Festival

ADAMSKI MOROSKI MADDEN CUMBERLAND & GREEN LLP

ATTORNEYS AT LAW

Post Office Box 3835 • San Luis Obispo, California 93403-3835
T 805-543-0990 • F 805-543-0980 • *www.ammcglaw.com*

May 16, 2023

Joseph Michael Montes, Esq. **VIA EMAIL**
City Attorney for City of Santa Clarita
Burke Williams & Sorensen LLP
444 S. Flower Street, Suite 2400
Los Angeles, CA 90071-2953
jmontes@bwslaw.com

Re: Master Case Number 21-109
Renewed Request for Extension of Time to Comment or Otherwise Respond to the Draft EIR

Joe:

Yesterday at approximately 4:55 p.m. City Staff finally provided my firm with an edited response to our Public Records Request of April 19, 2023. It is unrealistic to expect us to be able to review, analyze, and evaluate those documents before this evening's Planning Commission meeting. Our request for additional time to comment on the draft EIR was predicated upon our timely receipt of all the documents we requested in our Public Records Request. As a result, PCPOA renews its request for additional time to comment on the draft EIR. Under these new circumstances, PCPOA requests at least 60 days upon which to comment on the draft EIR. Please provide a copy of this letter to the Planning Commissioners prior to this evening's meeting. Ms. Berlin and the planners are also copied on this letter. Thank you.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

/s/ Jeff Hacker

JEFFREY A. HACKER

JAH:tlg
j:\clients\placerita canyon poa\corr\ltr to montes 5.16.23 renewed ext req.docx

cc: Erika Iverson, Planner, EIverson@Santa-Clarita.com
Patrick LeClair, Director of Planning, PLeClair@Santa-Clarita.com
Renee Berlin, Chairperson of Planning Commission, via RAClark@Santa-Clarita.com
Client

Other Letters Submitted During the Draft EIR Comment Period

This section of **Attachment 1** of this Final EIR contains letters that were received by the lead agency but do not provide comments on environmental issues that are germane to CEQA or present specific information or questions regarding the EIR. Many of these letters express support for or opposition to the Project, some provide suggestions and opinions on the merits of the Project or components thereof, and some request consideration by the Planning Commission of their questions. As these comments do not address the adequacy of the Draft EIR, no response is required. However, these letters are included in the record and forwarded to the decision-makers for consideration.

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Shadow Box Project
Date:	Tuesday, April 18, 2023 12:38:13 PM

From: Suzie Rizzo <baroness1@sbcglobal.net>
Sent: Tuesday, April 18, 2023 12:10 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Shadow Box Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

This request concerns tonight's meeting.

Please have all Commissioners receive a copy of this request before the meeting tonight.

I am asking that the Heritage Valley Oak in the project be saved. Please require the project design around the oak and save it.

Thank you.

Susann Rizzo
25366 Avenida Ronada
Valencia, CA 91355
805-490-1057

Sent from AT&T Yahoo Mail for iPad

From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SCV Planning Commission, Shadow Box Studios project. Heritage Valley oak in the flood plain.
Date:	Tuesday, April 18, 2023 12:38:22 PM

From: paladinesq@aol.com <paladinesq@aol.com>
Sent: Tuesday, April 18, 2023 12:12 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SCV Planning Commission, Shadow Box Studios project. Heritage Valley oak in the flood plain.

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SCV Planning Commission

The Heritage Valley oak in the flood plain is almost as big as the Old Glory oak in Pico Canyon, and it should be protected.
Please require that Shadow Box Studios design around the Heritage oak and save it.
Please incorporate the Heritage Valley oak into the project.
Please cc all commissioners for this agenda item for tonight.
Thank you.
John Paladin, Box 801777, Valencia, CA 91380. 661 255 5000. PaladinEsq@AOL.com

From: Erika Iverson
To: Lisa Howe
Subject: FW: Planning Commission - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 1:34:57 PM

From: Gene Dorio, M.D. <grd51@aol.com>
Sent: Tuesday, April 18, 2023 1:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Planning Commission - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please distribute copies to all Commissioners

RE: Shadowbox Studios Project

Hello SCV Planning Commission

We write as proud carriers of keychains with the Seal of the City of Santa Clarita symbolic of our history and path to the future. This Seal is also behind you in the Chamber where you meet.

In the middle of our Seal is the mighty oak, representative of our community strength and resilience.

There is no better representation of the heritage oak on the flood plain in the middle of the Shadowbox Studio Project. We ask the Planning Commission to please make sure this beautiful and powerful symbol of our City remains intact, and any planning be around this beautiful oak tree.

Not having an oak tree in our City Seal, whether it be on a keychain or behind the dais, would be detrimental to the symbolism of who we are and whom we represent.

Do not allow this heritage oak tree be threatened or removed as its value to the community is more than symbolic.

Robin Clough and Gene Dorio, M.D.

From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Shadow Box Project
Date:	Wednesday, April 19, 2023 3:35:20 PM

From: Eli Bronwein <ebronwein@gmail.com>
Sent: Tuesday, April 18, 2023 4:51 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Re: Shadow Box Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Dear Commissioner,

Please preserve the big Heritage Oak that's located in the middle of the flood plain of the Shadow Box Project. It is not only a beautiful and historic part of the Santa Clarita Valley, but also essential to the health of the environment—reducing air pollution, stabilizing the ground during flooding, and providing an important habitat for endangered species. It would, therefore, be most advantageous to incorporate the Heritage Valley Oak into the project, thus saving it.

(Please forward this message to all the planning commissioners involved)

Thank you.

Sincerely,
Elliot Bronwein
Newhall, CA 91321-1388

From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Shadow Box Project
Date:	Monday, April 24, 2023 9:32:06 AM

From: Cher Gilmore <chergilmore@sbcglobal.net>
Sent: Tuesday, April 18, 2023 5:24 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Shadow Box Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

To the SCV Planning Commission:

First of all, please distribute this message to all commissioners.

My message: The Shadow Box Studio Project has plans that include destroying the big heritage oak in the middle of the flood plain. This is completely unnecessary. We need all the old-growth trees we can keep alive to help fight climate change, and these old oaks are supposed to be protected in this community! Please require the project to design AROUND the oak and save it.

Thank you!

Cher Gilmore
26834 Circle of the Oaks
Newhall, CA 91321
661-251-1718

From: Erika Iverson
To: Lisa Howe
Subject: FW: Master Case 21-109
Date: Monday, April 24, 2023 9:32:47 AM

From: Jeff Secor <secor6@sbcglobal.net>
Sent: Tuesday, April 18, 2023 5:36 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Master Case 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

My name is Jeff Secor and we live at 21224 Placerita Canyon Road.

I worked for the City of Los Angeles for 31 years as a Building Maintenance Supervisor. What you are proposing, no pun intended, is going to be a train wreck if implemented.

We have lived in the canyon for 22 years. We thinking leaving that space open for a park would be the best for our community, but the reality is that we know it won't happen.

We see how the Dockweiler project plan owas and is being handled, with no regard to the huge traffic problems that will occur on 13th Street. Instead of taking the road to Market Street, it was all decided beforehand that you never planned to do that. As you know, virtually all of the residents of Placerita Canyon and Dockweiler were opposed to the road project.

The studio project is better than a low cost housing project, but the way these two projects are propose is not going to work. The City of Los Angeles usually doesn't listen to the voice of the communities they do projects in, such as road changes or buildings. The residents would voice their opinions about the impact it would have on their lives, but the city would go ahead anyway with whatever they wanted, many of which turn out disastrously.

We know how these projects will impact our canyon, especially traffic congestion that will be horrific if this project is not modified or scratched.

Politicians and developers want this project and may need to be open to some changes that may cost more money up front. My proposal is that Dockweiler be brought down to Market Street. It will serve the college better for their traffic needs as well.

The 13th Street train entrance should be left and upgraded somewhat, not expanded. The studio should not have access through there. A dedicated entrance and rail

crossing should be made at the extreme end of the property for their entrance and exit only. These can be done, of course, for a cost which I think in the long run will help all the parties impacted by these projects to work together.

Also, the size of the building and layout exceed what needs to be placed there as has been mentioned by other residents of the canyon. You should be listening to the concerns of those who live here, not to outsiders or people that are paid to promote the self interests of others with no regard to the human factor.

Again, the way it stands, this will be a train wreck for everyone involved in this canyon.

Thank you,
Jeff & Sharon Secor

From: Erika Iverson
To: Lisa Howe
Subject: FW: Shadowbox Studio access
Date: Wednesday, May 3, 2023 1:17:37 PM

Lisa,
Please include the below comments into the record

-----Original Message-----
From: Jason Crawford <JCRAWFORD@santa-clarita.com>
Sent: Wednesday, May 3, 2023 11:53 AM
To: Clay Rawlins <cmud1@mac.com>
Cc: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: RE: Shadowbox Studio access

Hi -

Thanks for your email. I am cc'ing the Senior Planner for this proposed project, Erika Iverson, so she can include your email with the comments received on the project.

Jason C

_____

Jason Crawford
Director of Community Development
City of Santa Clarita
Phone: (661) 255-4969

-----Original Message-----
From: Clay Rawlins <cmud1@mac.com>
Sent: Wednesday, May 3, 2023 11:42 AM
To: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Shadowbox Studio access

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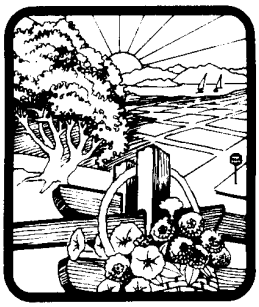
The main entrance to the proposed Shadowbox Studio facility should be through a Railroad underpass at the intersection of 15th St. and Railroad Ave.
The topography from 13th St to Placerita Creek support this theory and the precedent has been set with the CPUC for a development in Canyon Country. The rail line can remain in service with a temporary reroute during construction of the overpass.
Extending Dockweiler Dr. into Placerita Cyn. is a very shortsighted and problematic solution.
Dockweiler Dr. should connect to Market St and not create a route to avoid Downtown Newhall.

Thanks for reading
Clay Rawlins
Santa Clarita

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY
AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386
www.scope.org



5-1-23

Erika Iverson, Planning
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Sent via email to eiverson@santa-clarita.com

Re: Newhall Studio Project 21-109 Request for an extension to review the EIR
Please copy to all members of the Planning Commission

Dear Ms. Iverson and Planning Commission Members

SCOPE is a planning and conservation non-profit group now celebrating its 35th year of work in the Santa Clarita Valley.

This project proposes to build a huge industrial development on an area of floodplain currently zoned for housing. It will fundamentally change the character of the Newhall neighborhood and old town district which the City has strived to create and which the City has spent enormous amounts of public funds to promote. It will destroy a number of oaks including the iconic heritage oak located in the middle of this flood plain which is older than the town of Newhall itself.

The EIR was released just prior to the Easter and Passover holidays when many people had their minds on family and religious celebrations and thus may not have been aware of its release. It is also a massive document requiring a great deal of reading and research.

Due to all of these factors and the importance of widespread community involvement on a project that will so dramatically change the character of an existing neighborhood, we request that you extend the comment period to at least 120 days for this document.

It is vitally important that you receive input from a wide variety of community members on this project and that community members have adequate time to provide you with a full array of information to help you make the best decision for our community.

Thank you for your consideration of this matter.

Sincerely,

Lynne Plambeck,

President

From: Erika Iverson
To: Lisa Howe
Subject: FW: Stusio Project 21-109
Date: Monday, May 8, 2023 7:46:19 AM

From: Dan G <dgfxdgfx@hotmail.com>
Sent: Monday, May 8, 2023 6:09 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

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Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

From: Erika Iverson
To: Lisa Howe
Subject: FW: Stusio Project 21-109
Date: Tuesday, May 9, 2023 7:51:06 AM

-----Original Message-----
From: Lisa <luvntreez@yahoo.com>
Sent: Monday, May 8, 2023 10:59 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.

Please copy to all planning commissioners.

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 10, 2023 7:48 AM
To: Lisa Howe
Subject: FW: Studio Project 21-109

From: Cher Gilmore <chergilmore@sbcglobal.net>
Sent: Tuesday, May 9, 2023 11:18 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Studio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

To the Planning Commission:

Please require the developer for this project to change the plan in order to save the heritage oak and other oaks on this property (12 oaks total). Old growth trees are our best tool for slowing down climate change because they absorb so much CO2 -- far more than newly planted trees, which take about 10 years to even BEGIN absorbing carbon. How can we even *think* of chopping down these magnificent and crucial natural wonders? And for what? Another building?

This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.

Also, please copy this message to all planning commissioners.

Thank you,

Cher Gilmore

26834 Circle of the Oaks
Santa Clarita, CA 91321
661-251-1718

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
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rfranco@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
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KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 12, 2023

VIA EMAIL AND OVERNIGHT MAIL

Jason Crawford
Director of Community Development
City of Santa Clarita
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91335
Jcrawford@santa-clarita.com

Mary Cusick
City Clerk
City of Santa Clarita
23920 Valencia Blvd. Suite 110
Santa Clarita, CA 91335
mcusick@santa-clarita.com

Via Email Only
Erika Iverson, Associate Planner
Eiverson@santa-clarita.com

Re: Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project (Master Case 21-109) and Immediate Access to Reference Documents

Dear Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development in Los Angeles (CREED LA) to respectfully request that the City of Santa Clarita ("City") extend by at least 30 days the public review and comment period for the Draft Environmental Impact Report ("DEIR") prepared for the Shadowbox Studios Project (Master Case 21-109) ("Project"), which currently ends on May 22, 2023.

We are requesting an extension due to the City's failure to provide timely access to all documents referenced in the DEIR. We ask that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its

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air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

On April 27, 2023, our office submitted a request, pursuant to the California Environmental Quality Act ("CEQA"),[1] for immediate access to any and all *documents referenced or relied upon in the Draft Environmental Impact Report*, excluding the DEIR, its appendices and documents available on the City of Santa Clarita website as of that date.[2] CEQA's section 21092(b)(1) and CEQA Guidelines section 15087(c)(5) require that "all documents referenced" and "all documents incorporated by reference" in an environmental impact report shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[3]

On May 8, 2023, the City responded that it was "in receipt of your public records request," and that because the request involved numerous separate and distinct records, the City claimed an extension pursuant to Government Code section 7922.535(b) to provide the missing documents. The City stated that "pursuant to the extension provision, you will be contacted on or before May 22, 2023, with the availability of the records responsive and appropriate for disclosure."

As an initial matter, our April 27, 2023 request was made pursuant to the provisions of CEQA, not the California Public Records Act.[4] Therefore, the extension provision cited by the City (Government Code section 7922.535(b)) is inapplicable.

Moreover, CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[5] The courts have held that the failure to provide even a few pages

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[1] Pub. Resources Code §§ 21000 *et seq*.
[2] Letter to Jason Crawford and Erika Iverson, City of Santa Clarita from Sheila Sannadan, Adams Broadwell Joseph & Cardozo re: Request for Immediate Access to Documents Referenced in the Draft Environmental Impact Report – Shadowbox Studios Project (Master Case 21-109) (April 27, 2023).
[3] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5).
[4] Government Code §§ 7920.000, *et seq*.
[5] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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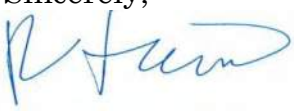
of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[6] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[7]

By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City is depriving members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project and is violating the procedural mandates of CEQA. The City's suggestion that it will not make documents referenced in the DEIR available for our review until May 22, 2023—the last day to submit comments on the Project—plainly violates CEQA and would preclude any meaningful public review and comment. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR by at least 30 days from the date on which the City releases ***all*** the DEIR reference documents for public review.

Given the short time before the current public review and comment period ends, please contact me as soon as possible with your response to this request, but no later than close of business on **Monday, May 15, 2023**. Thank you for your consideration and prompt response to this request.

Sincerely,



Richard M. Franco

RMF:acp

[6] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[7] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

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ADAMSKI MOROSKI MADDEN CUMBERLAND & GREEN LLP

ATTORNEYS AT LAW

Post Office Box 3835 • San Luis Obispo, California 93403-3835
T 805-543-0990 • F 805-543-0980 • *www.ammcglaw.com*

May 8, 2023

Joseph Michael Montes, Esq. **VIA EMAIL**
City Attorney for City of Santa Clarita
Burke Williams & Sorensen LLP
444 S. Flower Street, Suite 2400
Los Angeles, CA 90071-2953
jmontes@bwslaw.com

Re: Master Case Number 21-109
Request for Extension of Time to Comment or Otherwise Respond to the Draft EIR
Follow-up on Public Records Request

Joe:

I am following up on two interrelated matters. On April 19, 2023, I transmitted correspondence to you requesting additional time to respond to the EIR for this project. At or about the same time, I also requested specific materials from the city pursuant to the City's on-line public records request. More than 10 days have elapsed since the date of my on-line public records request. There has been no response from the city to either of my requests. Our ability to meaningfully comment on the EIR is compromised by not having the public documents requested. Please confirm two items: 1) whether the request for additional time to respond to the EIR has been granted and if not, why not; and 2) when can we expect to receive the requested documents together with any associated costs. Thank you.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

/s/ Jeff Hacker

JEFFREY A. HACKER

JAH:tlg
j:\clients\placerita canyon poa\corr\ltr to montes 5.8.23 re records & ext.docx

cc: Erika Iverson, Planner, EIverson@Santa-Clarita.com
Patrick LeClair, Director of Planning, PLeClair@Santa-Clarita.com
Client

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 12:25 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Liz Lyons <liz.lyonsphd@gmail.com>
Sent: Monday, May 15, 2023 12:22 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Sincerely,

Liz Lyons

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 3:35 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

-----Original Message-----
From: Randy Martin <drrandymartin@gmail.com>
Sent: Monday, May 15, 2023 1:54 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Please do not move or remove this tree. Our natural heritage is very important.

Dr. Randy Martin, OMD
23812 Spinnaker Court
Valencia, CA 91355

Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 3:36 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Jessi Vannatta <jessivannatta1@hotmail.com>
Sent: Monday, May 15, 2023 12:53 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Hello,

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Thank you for your consideration.

Jessi

Jessi Vannatta
[she/her/hers/ella]
931-607-8024

P: (626) 381-9248
F: (626) 389-5414
E: info@mitchtsailaw.com

Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

May 15, 2023

Erika Iverson, Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
Em: Eiverson@santa-clarita.com

RE: City of Santa Clarita's Shadowbox Studios Project (Master Case 21-109) SCH# 2022030762

Dear Erika Iverson,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments for the City of Santa Clarita's ("**City**") May 16, 2023, Planning Commission Meeting for the Shadowbox Studios Project ("**Project**").

The Southwest Carpenters is a labor union representing over 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225

Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

> [L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.[1]

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.[2]

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

> People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[3]

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and

---

[1] California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

[2] South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

[3] California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.[4] Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

> In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several

[4] Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

construction sites have been identified as sources of community spread of COVID-19.[5]

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

---

[6] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, *available at* https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, *available at* https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

[7] For details concerning Southwest Carpenters's ICRA training program, *see* https://icrahealthcare.com/.

The City should require the Project to be built using a workforce trained in ICRA protocols.

Sincerely,

Jason A. Cohen
Attorneys for Southwest Mountain States
Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects."[1] CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.[2]

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[3]

[1] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[2] "California Emissions Estimator Model." CAPCOA, 2017, *available at:* http://www.aqmd.gov/caleemod/home.
[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.[4]

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

> "$VMT_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$
>
> Where:
>
> n = Number of land uses being modeled."[5]

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = emissions from vehicle running for each pollutant
>
> VMT = vehicle miles traveled
>
> $EF_{running,pollutant}$ = emission factor for running emissions."[6]

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.[7] In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[8] The default number of construction-related worker trips is calculated by multiplying the

[4] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.
[5] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.
[6] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.[9] Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."[10] Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.[11] The operational home-to-work vehicle trip lengths are:

> "[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). [12]

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).[13]

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Minimum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.[14] In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

[14] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	**Rural (miles)**	**Urban (miles)**
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	**16.47**	**11.17**
Mininum	**10.80**	**10.80**
Maximum	**19.80**	**14.70**
Range	**9.00**	**3.90**

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6826**	**1,721.6826**	**0.1294**	**0.0000**	**1,724.9187**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	**4.1619**	**4.1142**	**6.1625**	**0.0189**	**1.3058**	**0.1201**	**1.4259**	**0.3460**	**0.1128**	**0.4588**	**0.0000**	**1,721.6823**	**1,721.6823**	**0.1294**	**0.0000**	**1,724.9183**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4103	1.4103
2	**12-1-2021**	**2-28-2022**	1.3613	1.3613
3	**3-1-2022**	**5-31-2022**	1.1985	1.1985
4	**6-1-2022**	**8-31-2022**	1.1921	1.1921
5	**9-1-2022**	**11-30-2022**	1.1918	1.1918
6	**12-1-2022**	**2-28-2023**	1.0774	1.0774
7	**3-1-2023**	**5-31-2023**	1.0320	1.0320
8	**6-1-2023**	**8-31-2023**	1.0260	1.0260

9	**9-1-2023**	**11-30-2023**	1.0265	1.0265
10	**12-1-2023**	**2-29-2024**	2.8857	2.8857
11	**3-1-2024**	**5-31-2024**	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	**2.9000e-003**	**0.0641**	**0.0233**	**2.0000e-004**	**6.4100e-003**	**2.1000e-004**	**6.6200e-003**	**1.7300e-003**	**2.0000e-004**	**1.9300e-003**	**0.0000**	**19.6816**	**19.6816**	**1.2800e-003**	**0.0000**	**19.7136**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	**7.7000e-004**	**6.0000e-004**	**6.8100e-003**	**2.0000e-005**	**1.9700e-003**	**2.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.7801**	**1.7801**	**5.0000e-005**	**0.0000**	**1.7814**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	**1.6400e-003**	**1.2700e-003**	**0.0144**	**4.0000e-005**	**4.1600e-003**	**3.0000e-005**	**4.2000e-003**	**1.1100e-003**	**3.0000e-005**	**1.1400e-003**	**0.0000**	**3.7579**	**3.7579**	**1.1000e-004**	**0.0000**	**3.7607**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	**2.8000e-004**	**2.1000e-004**	**2.4400e-003**	**1.0000e-005**	**7.7000e-004**	**1.0000e-005**	**7.7000e-004**	**2.0000e-004**	**1.0000e-005**	**2.1000e-004**	**0.0000**	**0.6679**	**0.6679**	**2.0000e-005**	**0.0000**	**0.6684**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	**0.4616**	**2.0027**	**3.9885**	**0.0152**	**1.2243**	**0.0121**	**1.2363**	**0.3278**	**0.0112**	**0.3390**	**0.0000**	**1,408.7952**	**1,408.7952**	**0.0530**	**0.0000**	**1,410.1208**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	**0.4135**	**1.5218**	**3.5707**	**0.0144**	**1.1953**	**9.8700e-003**	**1.2051**	**0.3200**	**9.1400e-003**	**0.3292**	**0.0000**	**1,327.3369**	**1,327.3369**	**0.0462**	**0.0000**	**1,328.4916**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	**3.7000e-004**	**2.7000e-004**	**3.1200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0800e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8963**	**0.8963**	**2.0000e-005**	**0.0000**	**0.8968**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	**5.9000e-004**	**4.1000e-004**	**4.9200e-003**	**2.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.4697**	**1.4697**	**4.0000e-005**	**0.0000**	**1.4706**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	**0.0101**	**6.9900e-003**	**0.0835**	**2.8000e-004**	**0.0307**	**2.3000e-004**	**0.0309**	**8.1500e-003**	**2.2000e-004**	**8.3700e-003**	**0.0000**	**24.9407**	**24.9407**	**6.1000e-004**	**0.0000**	**24.9558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1520
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	**237.1630**	**46.4588**	**49.5629**	**0.1517**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**15,251.5674**	**15,251.5674**	**1.9503**	**0.0000**	**15,278.5288**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.1916**	**4.1394**	**1.5644**	**0.0136**	**0.4346**	**0.0139**	**0.4485**	**0.1176**	**0.0133**	**0.1309**		**1,463.0568**	**1,463.0568**	**0.0927**		**1,465.3750**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	**0.0772**	**0.0530**	**0.7250**	**2.0600e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**204.9786**	**204.9786**	**6.0400e-003**		**205.1296**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	**0.0857**	**0.0589**	**0.8056**	**2.2900e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**227.7540**	**227.7540**	**6.7100e-003**		**227.9217**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	**0.0803**	**0.0532**	**0.7432**	**2.2100e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**219.7425**	**219.7425**	**6.0600e-003**		**219.8941**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.6857	8,800.6857	0.2429		8,806.7582
Total	**3.6242**	**15.3350**	**33.1995**	**0.1247**	**9.8688**	**0.0949**	**9.9637**	**2.6381**	**0.0883**	**2.7263**		**12,697.2339**	**12,697.2339**	**0.4665**		**12,708.8966**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.4408	8,478.4408	0.2190		8,483.9160
Total	**3.3229**	**11.9468**	**30.5127**	**0.1203**	**9.8688**	**0.0797**	**9.9485**	**2.6381**	**0.0738**	**2.7118**		**12,252.3170**	**12,252.3170**	**0.4172**		**12,262.7460**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	**0.0566**	**0.0361**	**0.5133**	**1.5900e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**158.7723**	**158.7723**	**4.1000e-003**		**158.8748**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	**0.0535**	**0.0329**	**0.4785**	**1.5400e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**153.8517**	**153.8517**	**3.7600e-003**		**153.9458**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.0852	1,641.0852	0.0401		1,642.0886
Total	**0.5707**	**0.3513**	**5.1044**	**0.0165**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,641.0852**	**1,641.0852**	**0.0401**		**1,642.0886**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	**237.2328**	**46.4651**	**47.3319**	**0.1455**	**18.2675**	**2.0461**	**20.3135**	**9.9840**	**1.8824**	**11.8664**	**0.0000**	**14,630.3099**	**14,630.3099**	**1.9499**	**0.0000**	**14,657.2663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	**0.2019**	**4.1943**	**1.5706**	**0.0133**	**0.4346**	**0.0141**	**0.4487**	**0.1176**	**0.0135**	**0.1311**		**1,430.6932**	**1,430.6932**	**0.0955**		**1,433.0812**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	**0.0858**	**0.0587**	**0.6629**	**1.9400e-003**	**0.2012**	**1.6300e-003**	**0.2028**	**0.0534**	**1.5000e-003**	**0.0549**		**193.0052**	**193.0052**	**5.6800e-003**		**193.1472**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	**0.0954**	**0.0652**	**0.7365**	**2.1500e-003**	**0.2236**	**1.8100e-003**	**0.2254**	**0.0593**	**1.6600e-003**	**0.0610**		**214.4502**	**214.4502**	**6.3100e-003**		**214.6080**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	**0.0896**	**0.0589**	**0.6784**	**2.0800e-003**	**0.2236**	**1.7500e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**		**206.9139**	**206.9139**	**5.7000e-003**		**207.0563**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	**4.0156**	**15.5266**	**30.9685**	**0.1186**	**9.8688**	**0.0957**	**9.9645**	**2.6381**	**0.0891**	**2.7271**		**12,075.9763**	**12,075.9763**	**0.4663**		**12,087.6341**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	**3.6978**	**12.1065**	**28.3496**	**0.1144**	**9.8688**	**0.0803**	**9.9491**	**2.6381**	**0.0743**	**2.7124**		**11,655.1325**	**11,655.1325**	**0.4151**		**11,665.5099**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	**0.0633**	**0.0400**	**0.4677**	**1.5000e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1700e-003**	**0.0456**		**149.5081**	**149.5081**	**3.8500e-003**		**149.6043**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	**0.0601**	**0.0364**	**0.4354**	**1.4500e-003**	**0.1677**	**1.2600e-003**	**0.1689**	**0.0445**	**1.1600e-003**	**0.0456**		**144.8706**	**144.8706**	**3.5300e-003**		**144.9587**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	**0.6406**	**0.3886**	**4.6439**	**0.0155**	**1.7884**	**0.0134**	**1.8018**	**0.4743**	**0.0123**	**0.4866**		**1,545.2860**	**1,545.2860**	**0.0376**		**1,546.2262**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6554**	**1,418.6554**	**0.1215**	**0.0000**	**1,421.6925**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	**4.1592**	**4.0240**	**5.1546**	**0.0155**	**0.9509**	**0.1175**	**1.0683**	**0.2518**	**0.1103**	**0.3621**	**0.0000**	**1,418.6550**	**1,418.6550**	**0.1215**	**0.0000**	**1,421.6921**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2021**	**11-30-2021**	1.4091	1.4091
2	**12-1-2021**	**2-28-2022**	1.3329	1.3329
3	**3-1-2022**	**5-31-2022**	1.1499	1.1499
4	**6-1-2022**	**8-31-2022**	1.1457	1.1457
5	**9-1-2022**	**11-30-2022**	1.1415	1.1415
6	**12-1-2022**	**2-28-2023**	1.0278	1.0278
7	**3-1-2023**	**5-31-2023**	0.9868	0.9868
8	**6-1-2023**	**8-31-2023**	0.9831	0.9831

9	**9-1-2023**	**11-30-2023**	0.9798	0.9798
10	**12-1-2023**	**2-29-2024**	2.8757	2.8757
11	**3-1-2024**	**5-31-2024**	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	**6.8692**	**9.5223**	**30.3407**	**0.0914**	**7.7979**	**0.2260**	**8.0240**	**2.0895**	**0.2219**	**2.3114**	**236.9712**	**12,294.1807**	**12,531.1519**	**15.7904**	**0.1260**	**12,963.4751**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	**0.0475**	**0.4716**	**0.3235**	**5.8000e-004**	**0.0496**	**0.0233**	**0.0729**	**7.5100e-003**	**0.0216**	**0.0291**	**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	**2.6500e-003**	**0.0639**	**0.0209**	**2.0000e-004**	**5.6200e-003**	**2.0000e-004**	**5.8200e-003**	**1.5300e-003**	**1.9000e-004**	**1.7200e-003**	**0.0000**	**18.9847**	**18.9847**	**1.2600e-003**	**0.0000**	**19.0161**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	**5.8000e-004**	**4.3000e-004**	**4.8700e-003**	**1.0000e-005**	**1.3400e-003**	**1.0000e-005**	**1.3500e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.2225**	**1.2225**	**4.0000e-005**	**0.0000**	**1.2234**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5405**	**103.5405**	**0.0335**	**0.0000**	**104.3776**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	**0.0796**	**0.8816**	**0.5867**	**1.1800e-003**	**0.1741**	**0.0377**	**0.2118**	**0.0693**	**0.0347**	**0.1040**	**0.0000**	**103.5403**	**103.5403**	**0.0335**	**0.0000**	**104.3775**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	**1.2200e-003**	**9.0000e-004**	**0.0103**	**3.0000e-005**	**2.8300e-003**	**2.0000e-005**	**2.8600e-003**	**7.5000e-004**	**2.0000e-005**	**7.8000e-004**	**0.0000**	**2.5808**	**2.5808**	**8.0000e-005**	**0.0000**	**2.5828**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	**0.0127**	**0.1360**	**0.1017**	**2.2000e-004**	**0.0807**	**5.7200e-003**	**0.0865**	**0.0180**	**5.2600e-003**	**0.0233**	**0.0000**	**19.0871**	**19.0871**	**6.1700e-003**	**0.0000**	**19.2414**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.3000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4587**	**0.4587**	**1.0000e-005**	**0.0000**	**0.4590**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1324**	**293.1324**	**0.0702**	**0.0000**	**294.8881**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	**0.2158**	**1.9754**	**2.0700**	**3.4100e-003**		**0.1023**	**0.1023**		**0.0963**	**0.0963**	**0.0000**	**293.1321**	**293.1321**	**0.0702**	**0.0000**	**294.8877**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	**0.3578**	**1.9125**	**2.9812**	**0.0119**	**0.8696**	**9.4100e-003**	**0.8790**	**0.2336**	**8.7800e-003**	**0.2424**	**0.0000**	**1,105.9771**	**1,105.9771**	**0.0451**	**0.0000**	**1,107.1039**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2789**	**286.2789**	**0.0681**	**0.0000**	**287.9814**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	**0.1942**	**1.7765**	**2.0061**	**3.3300e-003**		**0.0864**	**0.0864**		**0.0813**	**0.0813**	**0.0000**	**286.2785**	**286.2785**	**0.0681**	**0.0000**	**287.9811**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	**0.3177**	**1.4420**	**2.6646**	**0.0112**	**0.8490**	**7.3700e-003**	**0.8564**	**0.2281**	**6.8500e-003**	**0.2349**	**0.0000**	**1,042.5294**	**1,042.5294**	**0.0392**	**0.0000**	**1,043.5090**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.7100e-003**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	**2.8000e-004**	**1.9000e-004**	**2.2300e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.3000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.6156**	**0.6156**	**2.0000e-005**	**0.0000**	**0.6160**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1048**	**0.1609**	**2.5000e-004**		**5.1500e-003**	**5.1500e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**22.0292**	**22.0292**	**7.1200e-003**	**0.0000**	**22.2073**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	**4.4000e-004**	**2.9000e-004**	**3.5100e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.0094**	**1.0094**	**3.0000e-005**	**0.0000**	**1.0100**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	**4.1404**	**0.0213**	**0.0317**	**5.0000e-005**		**1.0700e-003**	**1.0700e-003**		**1.0700e-003**	**1.0700e-003**	**0.0000**	**4.4682**	**4.4682**	**2.5000e-004**	**0.0000**	**4.4745**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	**7.4800e-003**	**4.9300e-003**	**0.0596**	**1.9000e-004**	**0.0209**	**1.6000e-004**	**0.0211**	**5.5500e-003**	**1.5000e-004**	**5.7000e-003**	**0.0000**	**17.1287**	**17.1287**	**4.3000e-004**	**0.0000**	**17.1394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		**0.1398**	**1.2312**	**0.7770**	**7.6200e-003**		**0.0966**	**0.0966**		**0.0966**	**0.0966**	**0.0000**	**1,383.4268**	**1,383.4268**	**0.0265**	**0.0254**	**1,391.6478**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		**2,512.6465**	**0.1037**	**0.0215**	**2,521.6356**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	**5.1437**	**0.2950**	**10.3804**	**1.6600e-003**		**0.0714**	**0.0714**		**0.0714**	**0.0714**	**0.0000**	**220.9670**	**220.9670**	**0.0201**	**3.7400e-003**	**222.5835**

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		**585.8052**	**3.0183**	**0.0755**	**683.7567**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		**207.8079**	**12.2811**	**0.0000**	**514.8354**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0955
Maximum	**237.0219**	**46.4415**	**40.8776**	**0.1240**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,493.4403**	**12,493.4403**	**1.9485**	**0.0000**	**12,518.5707**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Total	**41.1168**	**67.2262**	**207.5497**	**0.6278**	**45.9592**	**2.4626**	**48.4217**	**12.2950**	**2.4385**	**14.7336**	**0.0000**	**76,811.1816**	**76,811.1816**	**2.8282**	**0.4832**	**77,025.8786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	**0.1760**	**4.1265**	**1.3884**	**0.0131**	**0.3810**	**0.0135**	**0.3946**	**0.1034**	**0.0129**	**0.1163**		**1,409.5212**	**1,409.5212**	**0.0912**		**1,411.8015**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	**0.0584**	**0.0375**	**0.5139**	**1.4100e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**140.7359**	**140.7359**	**4.2200e-003**		**140.8414**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	**0.0649**	**0.0417**	**0.5710**	**1.5700e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**156.3732**	**156.3732**	**4.6900e-003**		**156.4904**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	**0.0607**	**0.0376**	**0.5263**	**1.5100e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**150.8754**	**150.8754**	**4.2400e-003**		**150.9813**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.5482	3,896.5482	0.2236		3,902.1384
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.5585	6,042.5585	0.1697		6,046.8000
Total	**2.8378**	**14.7106**	**24.5142**	**0.0971**	**7.0087**	**0.0741**	**7.0828**	**1.8799**	**0.0691**	**1.9490**		**9,939.1067**	**9,939.1067**	**0.3933**		**9,948.9384**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.8762	3,773.8762	0.1982		3,778.8300
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.4028	5,821.4028	0.1529		5,825.2254
Total	**2.5807**	**11.3809**	**22.5017**	**0.0936**	**7.0088**	**0.0595**	**7.0682**	**1.8799**	**0.0552**	**1.9350**		**9,595.2790**	**9,595.2790**	**0.3511**		**9,604.0554**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	**0.0427**	**0.0255**	**0.3633**	**1.0900e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**109.0150**	**109.0150**	**2.8600e-003**		**109.0866**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	**0.0403**	**0.0233**	**0.3384**	**1.0600e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**105.6336**	**105.6336**	**2.6300e-003**		**105.6992**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	**0.4296**	**0.2481**	**3.6098**	**0.0113**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,126.7583**	**1,126.7583**	**0.0280**		**1,127.4583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.6034	50,306.6034	2.1807		50,361.1208

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	**237.0656**	**46.4460**	**39.6338**	**0.1195**	**18.2032**	**2.0456**	**20.2488**	**9.9670**	**1.8820**	**11.8490**	**0.0000**	**12,035.3440**	**12,035.3440**	**1.9482**	**0.0000**	**12,060.6013**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	**40.7912**	**67.7872**	**202.7424**	**0.6043**	**45.9592**	**2.4640**	**48.4231**	**12.2950**	**2.4399**	**14.7349**	**0.0000**	**74,422.3787**	**74,422.3787**	**2.8429**	**0.4832**	**74,637.4417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**3.3074**	**1.5513**	**4.8588**	**0.5008**	**1.4411**	**1.9419**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	**0.1835**	**4.1800**	**1.4144**	**0.0128**	**0.3810**	**0.0137**	**0.3948**	**0.1034**	**0.0131**	**0.1165**		**1,380.3262**	**1,380.3262**	**0.0941**		**1,382.6791**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	**0.0638**	**0.0415**	**0.4755**	**1.3300e-003**	**0.1369**	**1.1400e-003**	**0.1381**	**0.0363**	**1.0500e-003**	**0.0374**		**132.5649**	**132.5649**	**3.9900e-003**		**132.6646**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	**0.0709**	**0.0462**	**0.5284**	**1.4800e-003**	**0.1521**	**1.2700e-003**	**0.1534**	**0.0404**	**1.1700e-003**	**0.0415**		**147.2943**	**147.2943**	**4.4300e-003**		**147.4051**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**8.6733**	**1.6349**	**10.3082**	**3.5965**	**1.5041**	**5.1006**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	**0.0665**	**0.0416**	**0.4861**	**1.4300e-003**	**0.1521**	**1.2300e-003**	**0.1534**	**0.0404**	**1.1300e-003**	**0.0415**		**142.1207**	**142.1207**	**4.0000e-003**		**142.2207**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	**3.0904**	**14.8350**	**23.2704**	**0.0926**	**7.0087**	**0.0749**	**7.0836**	**1.8799**	**0.0699**	**1.9498**		**9,481.0104**	**9,481.0104**	**0.3984**		**9,490.9691**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	**2.8211**	**11.4799**	**21.2591**	**0.0893**	**7.0088**	**0.0601**	**7.0688**	**1.8799**	**0.0557**	**1.9356**		**9,155.1981**	**9,155.1981**	**0.3538**		**9,164.0437**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0327**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	**0.0469**	**0.0282**	**0.3349**	**1.0300e-003**	**0.1141**	**9.0000e-004**	**0.1150**	**0.0303**	**8.3000e-004**	**0.0311**		**102.6928**	**102.6928**	**2.7000e-003**		**102.7603**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	**0.0444**	**0.0257**	**0.3114**	**1.0000e-003**	**0.1141**	**8.8000e-004**	**0.1150**	**0.0303**	**8.1000e-004**	**0.0311**		**99.5045**	**99.5045**	**2.4700e-003**		**99.5663**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**236.5923**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	**0.4734**	**0.2743**	**3.3220**	**0.0107**	**1.2171**	**9.4300e-003**	**1.2266**	**0.3229**	**8.6800e-003**	**0.3315**		**1,061.3818**	**1,061.3818**	**0.0264**		**1,062.0410**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		**0.7660**	**6.7463**	**4.2573**	**0.0418**		**0.5292**	**0.5292**		**0.5292**	**0.5292**		**8,355.9832**	**8,355.9832**	**0.1602**	**0.1532**	**8,405.6387**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	**30.5020**	**15.0496**	**88.4430**	**0.0944**		**1.5974**	**1.5974**		**1.5974**	**1.5974**	**0.0000**	**18,148.5950**	**18,148.5950**	**0.4874**	**0.3300**	**18,259.1192**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:20 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

-----Original Message-----
From: Cindy Hazard <whiteface5287@yahoo.com>
Sent: Monday, May 15, 2023 6:38 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:21 AM
To: Lisa Howe
Subject: FW: Studio Project 21-109

-----Original Message-----
From: Shana Stage <stagefrit@aol.com>
Sent: Monday, May 15, 2023 8:17 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Studio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

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Please copy to all planning commissioners.

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 10:32 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Angela Moskow <amoskow@californiaoaks.org>
Sent: Tuesday, May 16, 2023 10:12 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Janet Cobb <jcobb@californiawildlifefoundation.org>
Subject: Stusio Project 21-109

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Greetings,

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Best,

Janet Cobb (Executive Officer of California Wildlife Foundation/California Oaks, cced above) and Angela Moskow

Angela Moskow
California Oaks Information Network Manager
California Wildlife Foundation/California Oaks
201 University Avenue

Berth H-43
Berkeley, CA 94710
www.californiaoaks.org
Telephone: (510) 763-0282

Lisa Howe

From: Erika Iverson
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From: Angela Moskow <amoskow@californiaoaks.org>
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RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

May 16, 2023

Via Email and Hand Delivery

Chair Renee Berlin
Members of the Planning Commission
City of Santa Clarita
23920 Valencia Blvd., Suite 140
Santa Clarita, CA 91355

Jason Crawford, Director of
Community Development
Erika Iverson, Associate Planner
City of Santa Clarita
23920 Valencia Blvd., Suite 302
Santa Clarita, CA 91355
Email: Jcrawford@santa-clarita.com; Eiverson@santa-clarita.com

Re: Agenda Item #1- May 16, 2023 Planning Commission Hearing on Shadowbox Studios Project (Master Case 21-109)

Dear Chair Berlin, Honorable Planning Commission members, Mr. Crawford and Ms. Iverson:

We are writing on behalf of the Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") with respect to the May 17, 2023 Planning Commission Agenda Item #1, the Shadowbox Studios Project (Master Case 21-109) ("Project") proposed by L.A. Railroad 93, LLC ("Applicant"). The Project proposes to develop a full-service film and television studio campus that would consist of approximately 476,000-square feet of sound stages; approximately 571,000-square feet of workshops, warehouses, and support uses; approximately 210,000-square feet of production and administrative offices, and approximately 37,500-square feet of catering and specialty service areas. The approximately 93-acre Project site is generally located at the northeast corner of Railroad Avenue and 13th Street and bounded by 12th Street, Arch Street, and 13th Street on the south; Railroad Avenue on the west; Metropolitan Water District (MWD) right-of-way (ROW) on the east; and HOA maintained slopes associated with adjacent residential uses to the north.

The staff report for the May 16 hearing recommends that the Planning Commission take the following actions: (1) receive the staff presentation in response to Planning Commission direction; (2) continue the public hearing to receive

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testimony from the applicant and the public; (3) close the public hearing and provide direction to staff on the hearing schedule; and (4) continue the Project to June 20, 2023. For the reasons set forth below, it is premature for the Planning Commission to act on the Project or to set dates for decisional hearings because the public comment period on the Project's Draft Environmental Impact Report ("DEIR") remains open, and the City must review and respond to comments on the DEIR before moving forward with any Project approval actions. CREED LA respectfully requests that the Planning Commission direct City staff to extend the public comment period for the Project's Draft Environmental Impact Report ("DEIR") and continue the public hearing to a date after the close of public comment on the DEIR.

I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the City of Los Angeles.

Individual members of CREED LA and its member organizations live, work, recreate, and raise their families in the City of Santa Clarita and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist onsite.

In addition, CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

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II. THE PLANNING COMMISSION SHOULD CONTINUE THE HEARING AND EXTEND THE PUBLIC COMMENT PERIOD ON THE DEIR DUE TO FAILURE TO COMPLY WITH CEQA

CREED LA is in the process of reviewing the Project's DEIR with its experts and plans to submit legal and technical comments prior to the close of the public comment period, which currently ends on May 22, 2023. Based on our review of the DEIR and available supporting documents, it appears that the DEIR fails to comply with the requirements of the California Environmental Quality Act[1] ("CEQA") as it fails to disclose, analyze and mitigate all of the Project's potentially significant impacts, including impacts on air quality, greenhouse gas emissions, biological resources, noise, and transportation.

Any Planning Commission action on the Project, including the proposed recommendations to close the public hearing and set dates for decisional hearings, is premature at this time because the public comment period on the DEIR remains open. CREED LA and other members of the public have yet to provide substantive comments on the DEIR, and the City must review and address those comments before closing public comment and conducting Project approval hearings.[2] Revision and recirculation of the DEIR may also be required prior to release of a Final EIR and any hearings on the Project.[3] Accordingly, CREED LA respectfully requests that the Planning Commission defer any action on the Project and continue the public hearing to a date after the close of public comment on the DEIR.

In addition, we request that the City extend the public review and comment period for the DEIR on the grounds that the City failed to make available all of the documents referenced in and relied upon by the DEIR during the entire public comment period, in violation of CEQA. We first submitted a request for access to such documents pursuant to CEQA on April 27, 2023.[4] On May 8, the City responded that "you will be contacted on or before May 22, 2023 [i.e., the last day to submit public comments on the DEIR], with the availability of the records responsive and appropriate for disclosure."

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[1] Pub. Resources Code, §§ 21000 et seq.; 14 Cal. Code Regs. ("C.C.R") §§ 15000 et seq.
[2] 14 C.C.R. § 15088 (b) (written responses to public comments on a DEIR must include disposition of significant environmental issues raised in comments, including any revisions to the proposed project to mitigate anticipated impacts or objections).
[3] Pub. Resources Code § 21092.1; 14 C.C.R. § 15088.5.
[4] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Immediate Access to Documents Referenced or Relied Upon in the Draft Environmental Impact Report-Shadowbox Studios Project.

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On May 12, 2023, we requested that the City extend the public comment period as the City had not provided access to all of the DEIR reference documents.[5] We reiterate that request here, and note that there are at least two additional pending requests for an extension of the DEIR comment period.[6] CREED LA's request is made pursuant to CEQA, which requires that "all documents referenced in the draft environmental impact report or negative declaration" be available for review and "readily accessible" during the entire comment period.[7]

Our May 12 request for extension of time included a demand that the City immediately comply with our April 27, 2023 request for immediate access to all documents referenced and incorporated by reference in the DEIR, including but not limited to (1) all documents referenced and incorporated by reference in the DEIR which are not available by weblink; (2) all unlocked native input files for CalEEMod modeling performed for the Project, as referenced in DEIR sections 4.2 and 4.7 and Appendix C; (3) any Excel file(s) prepared by Rincon Consultants, Inc. in connection with its air quality analysis and calculations for the Project; (4) missing documents referenced in DEIR section 4.14 and Appendix L, including Transportation Analysis Updates in Santa Clarita (May 19, 2020), Transportation Analysis Updates in Santa Clarita (June 20, 2023) and the Placerita Meadows EIR Traffic Study; (5) any reports or other documents reflecting an April 27, 2022 site visit by Michael Baker International, as referenced in Appendix D, pg. 18.

Without access to these critical DEIR reference documents during the entire public comment period, CREED LA and other members of the public have been precluded from having a meaningful opportunity to comment on the DEIR as required by CEQA. Without access to these documents, CREED LA and other members of the public have been unable to evaluate the accuracy of the City's impact analysis, or the efficacy of the City's proposed mitigation measures.

CEQA compels a lead agency to make all documents referenced in an environmental impact report "available for review" during the entire public comment period.[8] The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the public review period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional

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[5] May 12, 2023 letter from Richard M. Franco, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Extension of Comment Period for the Draft Environmental Impact Report for Shadowbox Studios Project.
[6] City of Santa Clarita Planning Commission Agenda Report, pg. 14.
[7] PRC §§ 21092(b)(1) (emphasis added); 14 Cal. Code Regs. ("CCR") § 15087(c)(5).
[8] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15087(c)(5); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442, as modified (Apr. 18, 2007).

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public comment.[9] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[10]

On May 15, 2023, the City produced a number of the DEIR reference documents requested, with only a week remaining in the DEIR public comment period. This belated production deprived CREED LA of timely access to the documents, and does not cure the City's failure to make these documents available during the entire public comment period. By failing to make all documents and underlying data referenced in the DEIR readily available during the entirety of the public comment period, the City has denied CREED LA and members of the public the ability to meaningfully comment on the potentially significant environmental impacts of the Project in violation of CEQA's procedural mandates. Even with the belated document production, the size of the DEIR and the Project's complexity make it difficult to effectively review and comment on the DEIR by the current comment deadline of May 22, 2023. Therefore, we respectfully request that the City extend the public review and comment period on the DEIR to at least June 14, 2023, which is 30 days after the date on which the City released the missing DEIR reference documents for public review.

Finally, we note that CREED LA did not receive formal notice of the May 16, 2023 Planning Commission hearing, despite our express written request for such notice. On April 27, 2023, we sent a letter via email and U.S. Mail to the City Clerk and the Director of Community Development requesting "**mailed notice of any and all hearings, meetings and/or actions related to the Project.** [emphasis in original]"[11] The letter noted that these requests were made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108, 21152, and 21167(f), and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. We only learned of the May 16 hearing by chance, in an email by Director Crawford in response to our May 12 letter requesting an extension of the DEIR public comment period. We hereby reiterate our request for mailed and emailed notice of any and all hearings, meetings and/or actions related to the Project.

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[9] *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.
[10] *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3rd 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
[11] April 27, 2023 letter from Sheila Sannadan, Adams Broadwell Joseph & Cardozo to Jason Crawford, Erika Iverson and Mary Cusick re Request for Mailed Notice of Actions and Hearings Related to Shadowbox Studios Project.

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III. CONCLUSION

For the foregoing reasons, CREED LA requests that the Planning Commission defer any consideration of the Project and the DEIR, extend the DEIR public review and comment period, and continue the public hearing to a date after the close of the public review and comment period.

Thank you for your consideration of these comments.

Sincerely,

Richard M. Franco

RMF:acp

6644-004acp

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 11:35 AM
To: Lisa Howe
Subject: FW: Stusio Project 21-109

From: Kubler, Janet E <janet.kubler@csun.edu>
Sent: Tuesday, May 16, 2023 11:30 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Stusio Project 21-109

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Please ask the developer to change the plan to save the heritage oak and other oaks on this property.
This project will change the whole character of Old Town Newhall. Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

I am a local citizen who came to this community to raise my children because of the quality of life here. Please do more to protect the natural heritage and beauty of the Santa Clarita Valley. Heritage Oaks cannot be purchased or replaced. They can only be protected to have them in the future.

Sincerely,
Janet Kubler

Janet E. Kübler, Ph.D.
Biology Department
CSUN
18111 Nordhoff Street
Northridge, CA 91330-8303

California Seaweed Festival

ADAMSKI MOROSKI MADDEN CUMBERLAND & GREEN LLP

ATTORNEYS AT LAW

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T 805-543-0990 • F 805-543-0980 • *www.ammcglaw.com*

May 16, 2023

Joseph Michael Montes, Esq. **VIA EMAIL**
City Attorney for City of Santa Clarita
Burke Williams & Sorensen LLP
444 S. Flower Street, Suite 2400
Los Angeles, CA 90071-2953
jmontes@bwslaw.com

Re: Master Case Number 21-109
Renewed Request for Extension of Time to Comment or Otherwise Respond to the Draft EIR

Joe:

Yesterday at approximately 4:55 p.m. City Staff finally provided my firm with an edited response to our Public Records Request of April 19, 2023. It is unrealistic to expect us to be able to review, analyze, and evaluate those documents before this evening's Planning Commission meeting. Our request for additional time to comment on the draft EIR was predicated upon our timely receipt of all the documents we requested in our Public Records Request. As a result, PCPOA renews its request for additional time to comment on the draft EIR. Under these new circumstances, PCPOA requests at least 60 days upon which to comment on the draft EIR. Please provide a copy of this letter to the Planning Commissioners prior to this evening's meeting. Ms. Berlin and the planners are also copied on this letter. Thank you.

Very truly yours,

ADAMSKI MOROSKI MADDEN
CUMBERLAND & GREEN LLP

/s/ Jeff Hacker

JEFFREY A. HACKER

JAH:tlg
j:\clients\placerita canyon poa\corr\ltr to montes 5.16.23 renewed ext req.docx

cc: Erika Iverson, Planner, EIverson@Santa-Clarita.com
Patrick LeClair, Director of Planning, PLeClair@Santa-Clarita.com
Renee Berlin, Chairperson of Planning Commission, via RAClark@Santa-Clarita.com
Client

Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 17, 2023 5:16 PM
To: Lisa Howe
Subject: FW: Blackhall Studios Private Rail Crossing
Attachments: Shadowbox Studios At-Grade Crossing.pdf; RE EXTERNAL 13th Street Highway-Rail Crossing (CPUC No. 101VY-30.39 DOT No. 746016J.msg; Appendex H at grade_cross_stand_guidelines_manual_10.03.16.pdf

---

From: E.D. (Del) Nelson <nelsonconstr@earthlink.net>
Sent: Wednesday, May 17, 2023 3:34 PM
To: Ian Pari <IPARI@santa-clarita.com>
Cc: Erika Iverson <EIVERSON@santa-clarita.com>; Jason Crawford <JCRAWFORD@santa-clarita.com>; Patrick Leclair <PLECLAIR@santa-clarita.com>; Rachel A. Clark <RACLARK@santa-clarita.com>
Subject: Blackhall Studios Private Rail Crossing

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Dear Mr. Perry,

As a 25 year resident and homeowner of Placerita Canyon, I would like to go on record as stating that while I am not in disagreement to the Shadowbox Studio Development as a whole, I take exception to the added dangers posed for the residents and families of Placerita Canyon, due to the lack of additional means of ingress and egress to the proposed site. If a condition of development was a "Private" Truck Crossing and Entrance at 15th I would bet the applicant would figure out a way to do it.
I wrote my letter (attached) to last year to METRO / SCRRA and they responded to me two days later (also attached). The one comment that stands out in their response is "*As you have mentioned, the City of Santa Clarita had originally identified and led efforts to improve the 13th Street crossing. This effort has now been taken over by Shadowbox Studios*".
I do not recall the Planning Commission being told that the applicant was "In Charge" of designing their own crossing. I guess that will make them ultimately responsible for any design deficiencies too?

I have attached the SCRRA's Appendix H "Guidelines for Design of At Grade Crossings" that I would like added to the comments for the DEIR for Shadow Box Studios in its entirety and for the record. I have also attached my letter to the METRO / SCRRA, dated 10/11/2022, their response (dated 10/14/2022 and would like those to added to the DEIR comments, for the record.
It is amazing that the individuals in charge of the 13th Street crossing are entitled to modify the Design Criteria, at will, and yet have "No Knowledge" of other sections of it.
Funny how that works.

Thanks,

E.D. (Del) Nelson
President
E.D. Nelson Construction, Inc.

22115 Placeritos Blvd.
Newhall, CA 91321
O (661) 254-1321
F (661) 254-1368
C (818) 400-1531

Tuesday, October 11, 2022

METROLINK / Southern California Regional Rail Authority
Pomona Office:
2558 Supply Street
Pomona, CA 91767

Attn: Justin Fornelli, Director, Engineering & Construction
Elizabeth Lun, Assistant Director, Design
Andy Althorp, Assistant Director, Construction

RE: **13th Street Highway-Rail Crossing (CPUC No. 101VY-30.39, DOT No. 746016J) in the City of Santa Clarita, County of Los Angeles**
(AKA: The Lyons Avenue/Dockweiler Drive Extension Project
State Clearinghouse No. 2013082016)

Dear Sirs,

I contacted the SCRRA back in 2018 and 2020 with my concerns regarding the At-Grade Crossing in the Santa Clarita Valley, known as the 13th Street Highway-Rail Crossing, for both the increase in traffic as well as the inability of any expanded crossing ever being able to comply with *SCRRA Highway-Rail Grade Crossings Recommended Design Practices and Standards Manual (SCRRA Manual)*.

My concerns at that time were based on the 2nd phase of the road design for the segmented Dockweiler Drive Extension project, that would cross the SCRRA Right of Way at 13th Street, aka CPUC No. 101VY-30.39, DOT No. 746016J.

In reviewing the requirements for an At-Grade Crossing in the *SCRRA Manual* it became very clear that the 13th street crossing could never comply with the recommended design criteria, due to the limiting 50' horizontal setback from Railroad Ave. Even though the city is reportedly raising the road height to limit the vertical offset it can never meet the goals of the Manual for 1% off the tracks and refuge area.

The intent of this letter is not to address past decisions, but rather inquire as to the possibility of perhaps making another concession to the required design in order to make the crossing far safer for the general public.

The previous builder of the residential development, that was in the process of obtaining their entitlements, sold out to a developer of Movie Studios. This developer, "Shadowbox", is well funded and seems intent on moving forward with the project. The scale of this proposed project is the same as Warner Brothers Studios in Burbank. That 62 acre studio has the luxury of having street frontage on three sides and NINE separate entrances.

The Shadowbox Studio Project is approximately 70 +- acres with TWO entrances (The project claims three) with frontage on 2 streets. These entrances are separated by less than ¼ mile and will be serviced by the 13th Street At-Grade Crossing. The secondary highway to this lot will be down a steep road known as Dockweiler Drive, that has a 7 ½% grade on the first segment of the Segmented Project, and thus will be the second choice of travel for the 40' and 53' semi-trucks transporting movie props to the studio daily.

In addition to this proposed studio project, there are numerous churches, a 3,500 student college and just recently a daycare center and 9 acres were purchased for a private high school. On top of that there is another private movie studio and the Compass Blueprint Project that was approved as part of the General Plan and allows for 750 additional dwelling units. This is all on top of the existing 450+- SFR's that are existing in the canyon.

This leads me to the purpose of this letter.

Section 3.1.2 in the *SCRRA Highway-Rail Grade Crossings Recommended Design Practices and Standards Manual* speaks about Private Highway-Rail Grade Crossings in which the crossing is owned or controlled by a private party, and not a highway agency.

It goes on to state that " *Private highway-rail grade crossings are" "at driveways to private property, and in many cases are used by the general public essentially in the same manner as a public crossing. "In many cases, the SCRRA, or the member agency, provides access to private property under an agreement between the property owner and the SCRRA or SCRRA member agency."*

My question is quite simple really.

Is it or could it be remotely possible for Shadowbox Studios to apply for and construct a coordinated private At-Grade Crossing at or about 15th street that serviced the entrance to the studio lot. The traffic volume across would remain the same but prevent the co-mingling of the semi-trucks and commuter traffic.

If that private entrance / crossing were to move north to 15th Street or further, it would allow more efficient queuing of the studio's traffic at their 15th Street entrance while allowing a less restricted and safer commuter traffic flow at 13th Street. As the ROW moves north, the horizontal setback from Railroad also increases, allowing for a larger refuge area that the 40' and 53' trailers require.

In addition to everything else called out above, this proposed 15th Street Private Crossing would be an additional Emergency Egress Point. It would enable the evacuation of thousands of individuals, in an emergency situation that precluded evacuation to the east. One such Santa Ana fire event that occurred on August 28, 1962 burnt Gene Autrey's Melody Ranch Studio, at the other end of Placerita Canyon, to the ground.

The local property owners of Placerita Canyon are still extremely concerned that the accumulated residential, commercial, student and commuter traffic crossing the proposed Dockweiler / 13th Street At-Grade Crossing will present a significant danger to current and future Santa Clarita residents and we urge you to consider this proposal. This is a crossing that perhaps warrants some creative thinking if it is going to be allowed.

Please feel free to contact me with any questions or hard copy backup,

Sincerely,

Eugene D. Nelson

Eugene D. Nelson
President
E.D. Nelson Construction, Inc.
22115 Placeritos Blvd.
Newhall, CA 91321
(818) 400-1531

Lisa Howe

From: Fornelli, Justin P.E. <FornelliJ@scrra.net>
Sent: Friday, October 14, 2022 3:52 PM
To: E.D. (Del) Nelson
Cc: Lun, Elizabeth P.E.; Althorp, Andrew
Subject: RE: [EXTERNAL] 13th Street Highway-Rail Crossing (CPUC No. 101VY-30.39, DOT No. 746016J

Mr. Nelson,

Thank you for your email, I had not received the hard copy letter dated October 11th. I appreciate your continued concern for safety at the 13th Street at-grade crossing on Metrolink's Antelope Valley Line. As you have mentioned, the City of Santa Clarita had originally identified and led efforts to improve the 13th Street crossing. This effort has now been taken over by Shadowbox Studios. SCRRA is not leading this project and has limited input into the creation of a new at-grade crossing. I recommend that you contact the City of Santa Clarita with your concerns, if you haven't already. In addition, I understand that the studio project still needs to complete the environmental review and approval process and that there should be an opportunity for you to provide your concerns during the public comment period of that environmental review process.

SCRRA will consider your comments regarding the 13th Street crossing when reviewing any improvements proposed by the developer.

Thanks,

METROLINK.
SMARTER. BETTER. ESSENTIAL.

JUSTIN FORNELLI, P.E.
Chief, Program Delivery
909.593.4291 **T**
213.503.9026 **M**

CELEBRATING OUR 30-YEAR JOURNEY, ONE RIDE AT A TIME.

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From: E.D. (Del) Nelson <nelsonconstr@earthlink.net>
Sent: Friday, October 14, 2022 7:52 AM
To: Fornelli, Justin P.E. <FornelliJ@scrra.net>
Cc: Lun, Elizabeth P.E. <LunE@scrra.net>; Althorp, Andrew <AlthorpA@scrra.net>
Subject: [EXTERNAL] 13th Street Highway-Rail Crossing (CPUC No. 101VY-30.39, DOT No. 746016J

EXTERNAL: This email message was sent from outside our organization. Proceed with caution when opening links or attachments. Submit as spam if you are not sure it is safe.

Dear Sirs,

I am writing to you to further inquire as to the status of the At-Grade Crossing known as 13th street (CPUC #101VY-30.39 DOT # 746016J) from the SCRRA / Metro and the PUC.

Recent major events, as further described in the attached letter, may necessitate revisiting your opinion of this crossing.

I would be happy to forward any backup that you may require on the subject or discuss at your convenience.

Thanks,

E.D. (Del) Nelson
President
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Newhall, CA 91321
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METROLINK

SCRRA HIGHWAY–RAIL GRADE CROSSINGS

RECOMMENDED DESIGN PRACTICES AND STANDARDS MANUAL

JUNE 30, 2009

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1.0 INTRODUCTION

1.1 BACKGROUND

SCRRA (aka Metrolink) is a five-county joint powers authority, created pursuant to California Public Utilities Code Section 130255 and California Government Code Section 6500 et seq., to plan, design, construct, and then maintain and administer the operation of the regional passenger rail lines serving the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

The five-county SCRRA member agencies are comprised of the following: Los Angeles County Metropolitan Transportation Authority ("METRO"); Ventura County Transportation Commission ("VCTC"); Orange County Transportation Authority ("OCTA"); San Bernardino Associated Governments ("SANBAG"); and Riverside County Transportation Commission ("RCTC"). SCRRA plans, designs, builds, operates, and maintains a commuter rail system in the five-county area on rail rights-of-way owned by the member agencies. Two major freight rail carriers, BNSF and UPRR, and the inter-city passenger carrier Amtrak, operate on SCRRA tracks through shared track agreements; SCRRA in turn operates on tracks owned by BNSF, UPRR, and North County Transit District (NCTD).

SCRRA's service territory is located in the Southern California metropolitan region. The operating environment can be typically categorized as urban and suburban, with some limited rural or undeveloped regions. SCRRA trains operate over 464 highway-rail grade crossings; of these, SCRRA is jointly responsible, with the applicable highway agency, for managing the design, construction, operation, and maintenance of over 312 highway-rail grade and pedestrian-rail grade crossings.

Changes and modifications to SCRRA's existing and any proposed new highway-rail grade crossings are subject to the regulations and approval of the California Public Utilities Commission (CPUC) and also certain provisions of Federal Railroad Administration (FRA) regulations. Most SCRRA highway-rail grade crossings are operated under relatively dense (> 50 daily) mixed commuter, freight, and inter-city passenger train traffic, with relatively high levels of motor vehicle, pedestrian, and bicycle traffic.

A large proportion of SCRRA highway-rail grade crossings feature multiple tracks and vehicle lanes. Table 1-1 summarizes the categories of highway-rail grade crossings over which SCRRA operates. (More detailed information regarding the characteristics of SCRRA's service patterns and service territory are provided in Appendix A).

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TABLE 1-1 Summary of SCRRA Highway-Rail Grade Crossings

Crossing Type	Owner and/or Operator/Maintenance Responsibility			
	Metrolink	**BNSF**	**UPRR**	**NCTD**
Public Highway	255	64	66	3
Public Pedestrian	10	2	0	0
Private Highway	29	1	5	0
Private Pedestrian	0	0	0	0
Station Pedestrian	18	3	8	0
Total	**312**	**70**	**79**	**3**

1.2 PURPOSE AND USE OF THE MANUAL

The large number of SCRRA highway-rail grade crossings, combined with high and increasing levels of train, motorized vehicle, and pedestrian traffic, has driven the need for SCRRA to develop a new, comprehensive single document that incorporates current and applicable highway-rail and pedestrian-rail grade crossing design standards and recommended design practices. This document has been titled the "SCRRA Highway-Rail Grade Crossing Recommended Design Practices and Standards Manual", or the "Manual" for short. This new Manual addresses many of the unique and complex planning, design, construction, maintenance and operational challenges associated with highway–rail grade crossings located on the SCRRA's Regional commuter rail network.

In this Manual, the term "highway-rail grade crossing" shall have the same meaning as rail-grade crossing, rail crossing, at-grade crossings, or crossing. The term "highway" will be used to mean roadway, road, street, or approach road, including medians, lighting, fencing, landscaping, sidewalks, traffic signs, traffic signals, traffic striping and all other highway improvements. The term "highway agency" shall mean the owner or owners of the highway including the property, easements, licenses, and all highway improvements. The "highway agency" will typically be a local municipality (a City), a County, the State, or in the case of a private crossing, a private party. The term "railroad" shall mean the SCRRA.

One challenging aspect of highway-rail grade crossing design, particularly in urban metropolitan areas, is that highway-rail grade crossings must typically be designed to allow for the safe and efficient mobility of three entirely different and conflicting modes of mobility: 1) the train; 2) the motor vehicle; and 3) non-motor vehicle pedestrians and bicycles. Adding to the uniqueness and complexity associated with highway-rail grade crossings is that the jurisdiction for the planning, design, maintenance and operations of highway-rail grade crossings is jointly controlled by at least two, and in some cases as many as four or five, owner/operators, and many other stakeholders.

Another contributing factor of complexity is that most SCRRA highway-rail grade crossings have experienced significant train, motor vehicle and pedestrian traffic growth, especially in the last two decades, and have high levels of traffic for all modes. National and regional Southern California studies have indicated that the combined vehicle and train use of most highway-rail grade crossings has increased by a factor of 2.5 over the past two decades, and this growth is anticipated to continue.

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A final factor contributing to the challenges associated with operating highway-rail grade crossings is that a significant number of highway-rail grade crossings, as well as highway and pedestrian approaches, are due, or will soon be due, for a cycle of major rehabilitation and renewal (R&R). These R&R programs typically occur every 15 to 30 years and keep highway-rail grade crossings current with traffic growth, design practices, technological improvements, and changes in regulations. For all the reasons stated above, a new and improved Manual was developed.

The primary purpose of the new Manual is to educate its user on the improved guidelines, practices, procedures, and policies that reflect current regulations, proven and accepted technological developments, and best available highway and rail industry design practices. Secondarily, the Manual user will apply these standards and recommended design practices to SCRRA highway-rail grade crossings.

Applying the standards and recommend design practices in this Manual will enhance the safety and efficiency of the highway-rail grade crossing and result in a highway-rail crossing that reflects “best practices” on a national basis. However, when considering the standards and recommended design practices in this Manual, any design team must exercise sound judgment and take into consideration the particular and unique conditions that may exist at a location.

For example (and as stated above), many highway-rail grade crossings and the associated highway and pedestrian approaches have not been significantly rehabilitated or renewed for two or three decades and often include design, right-of-way and operational characteristics that have evolved over several years. Such highway-rail crossings and approaches may not conform fully to current practices and standards as a result. This new Manual provides general guidance on how to enhance the safety and operations of a highway-rail grade crossing, in a relatively cost-effective manner and with minimal right-of-way impact, while providing a design team the flexibility necessary to meet site-specific and special “legacy” circumstances found at many crossings.

The new Manual will be used when significant changes and modifications are proposed to the 300-plus existing SCRRA highway-rail and pedestrian grade crossings and the approaches thereto. Another application of this Manual may arise when new SCRRA service is proposed and changes and modifications to existing highway-rail grade crossings may be warranted. Examples of new SCRRA service include start-up of commuter rail service on the Perris Valley Line or Redlands Branch.

A less frequent application of the Manual will occur when temporary (12 to 36 month) or permanent relocations are required of existing SCRRA highway-rail grade crossings. These relocations are most often associated with the construction of a new grade separation, railroad line change, or other similar major construction project. A very infrequent use anticipated for this Manual would be for any new highway-rail grade crossings. Any new highway-rail grade crossings are strongly discouraged by not only the SCRRA but by the CPUC and FRA and other State and Federal Agencies. New crossings typically require the closure of one or more nearby existing highway-rail grade crossings (refer to Section 1.3).

In conjunction with developing this Manual and compiling “recommended design practices and standards”, a thorough review was made of current standards, manuals, regulations, handbooks and other documents available from other highway agencies and

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private sector railroads. A nation-wide literature search was made of highway-rail grade crossing design practices, and site inspections were conducted of pubic agency and private railroads in both Southern and Northern California and on several large Northeastern Commuter Railroads to determine “best design practices and standards ” and application of new but proven technologies.

The costs of implementing the safety enhancements included within this Manual may be 50% to 100% higher than the Manual user has experienced in past grade highway-rail grade crossing improvement project and programs. The significant increase in costs may be due, in part, to the long time span since the last significant highway-rail grade crossing and highway approach improvement project was performed and the resulting backlog of required changes. The application of more costly and complex recommended design practices and new technologies such as exit gates and advanced preemption also contribute to increased costs.

A recent Orange County program involving nearly 50 highway-rail grade crossings resulted in costs ranging from an average of $1.5 million to $2.5 million per crossing. In some cases numerous minor right–of-way acquisitions (sliver or small takes less than 1,000 square feet) were also required.

Typical safety enhancements in the Orange County Program included: extended and widened center medians; improved sidewalks; improved highway approach geometry; four-quadrant pedestrian gates and flashers; exit gates; pre-signals; queue-cutter signals; vehicle traffic signal system interconnections with simultaneous and advanced preemption; and reconstructed and lengthened highway-rail grade crossing surfaces.

In addition to meeting or exceeding the recommended design practices and standards in an interim version of this Manual, the Orange County program included an option to allow local cities to apply for the crossings to be converted to a “quiet zone”, but only after all the interim Manual’s recommendations had been included in the program and placed in-service, and the relevant Federal Quiet Zone application and approval process had been completed.

1.3 MANUAL LIMITATIONS AND DISCLAIMERS

This Manual is not a textbook, nor a substitute for engineering knowledge, experience, or judgment. This Manual provides specialized guidelines, standard drawings, recommended design practices, procedures, and policies including graphs, tables, flowcharts, and associated “design aids” not ordinarily contained in many reference documents or textbooks. Some of these “design aids” are provided to facilitate solutions to a particular aspect of highway-rail grade crossing design. Sound judgment by experienced highway-rail grade crossing engineers and designers working as part of a multi-disciplinary and multi-agency design team must be exercised in the application of the Manual provisions to specific circumstances.

This Manual summarizes and outlines guidelines, recommended design practices and standards, procedures, and policies that have been developed to increase highway-rail grade crossing safety through treatments that generally reduce hazards and risks, while still maintaining sufficient functionality for the motorized vehicle, non-motorized pedestrian and bicycle, and train operations. These recommended design practices and standards have been adopted to facilitate and promote uniformity and consistency to the

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design of SCRRA highway-rail grade crossing modifications. SCRRA assumes no liability for the use of information contained in this Manual. It is not intended that any standard of conduct or duty toward the public shall be created or imposed by the use of the Manual. SCRRA does not warrant the accuracy or completeness of this Manual or that the Manual does not contain errors and omissions. The Manual user shall independently validate and verify the information in the Manual and promptly notify SCRRA of any discrepancies or inconsistencies discovered in the course of utilizing this Manual.

Except for new developments, no attempt is made to detail basic engineering techniques; for these, existing design manuals (as provided in the Reference Standards list) and applicable engineering textbooks should be used. For routine design processes and procedures, the Manual's recommended design practices and standards should be intuitive. The contents of this Manual do not preclude use of different methods when special or highly atypical conditions arise, and when approval (through the design exception process) is requested and approved. In any event, all highway-rail grade crossing designs under the jurisdiction of SCRRA must be approved by SCRRA as well as the local highway agency owner of the highway-rail grade crossing and highway approaches. Additionally, all highway-rail grade crossing designs must comply with all applicable CPUC, FRA, and Manual on Uniform Traffic Control Devices (MUTCD) regulatory requirements.

It is not intended that all the recommended design practices and standards included in this Manual be applied retroactively to minor physical or operational changes or to routine maintenance upgrades to existing crossings and highway approaches, as this would not be warranted or economically feasible.

It is intended that the recommended design practices and standards in this Manual be applied when significant physical or operational changes have occurred or are proposed, applicable regulatory approval has been received, realistic scopes and estimates have been developed, the required funding has been obtained, and there is an agreement on the scope, cost, schedule, responsibility and delivery of the proposed changes with the principal highway-rail grade crossing stakeholders.

In most cases, the primary responsibility for funding highway-rail grade crossing safety and operational changes does not reside with the SCRRA, but with the highway agency that owns and maintains the approach highways and pedestrian paths. In many cases, grade crossing safety enhancements are funded by applicable State and Federal grants funding. The SCRRA or SCRRA member agencies may elect to participate in funding improvements for a highway-rail grade crossing on a case-by-case basis or as part of a corridor-wide program.

The designs applied to any proposed highway-rail grade crossing modification or new highway-rail grade crossing should, to the maximum extent feasible, equal or exceed the recommended design practices and standards provided in the Manual. When considering changes and modifications to existing highway-rail grade crossings or if a new grade highway-rail grade crossing is proposed, the highest priority should be given first to treatments resulting in safety improvements and hazard reduction. After safety enhancements and hazard reductions are prioritized, appropriate consideration should then be equally given to: 1) availability of funding; 2) project costs—both the initial and the recurring operation and maintenance costs; 3) vehicular/pedestrian and train

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throughput, capacity, and operation; 4) short, mid-term, and long term maintenance impacts; 5) socio-economic and environmental impacts, especially those associated with noise (primarily locomotive horn blowing, but also warning bells)and the implementation of "quiet zones" by local highway agencies; and 6) right-of-way acquisitions.

In some cases, the recommended design practices and standards are subject to amendment as conditions and experience seems to warrant. Special situations may call for variation from the recommended design practices, standards, policies and procedures, subject to SCRRA and CPUC or FRA approval, or such other approval as may be specifically provided for in the Manual. A process for requesting deviations from the recommended design practices and standards has been provided.

SCRRA advises the user to completely review the entire Manual and develop a thorough level of understanding prior to beginning a project or study involving the design, assessment, or diagnostic evaluation of a SCRRA highway-rail grade crossing.

Due to the complexity of intersecting train, vehicle, and pedestrian traffic, combined with relatively high traffic and train volumes and the multi-jurisdictional ownership associated with most SCRRA highway-rail grade crossings, SCRRA strongly recommends a "lead Engineer" or "lead Designer" be designated and placed in "responsible charge" of the inter-disciplinary team involved with any highway-rail grade crossing modification. The lead Engineer shall be a registered California Civil or Traffic Engineer, and have at least five (5) years of recent experience associated with California highway-rail grade crossings.

Ideally, the lead Engineer or Designer, supported by the interdisciplinary and inter-agency design team, should have a good understanding of, and significant experience with, all aspects of the design, construction, operation, and maintenance of highways and streets, traffic signals, railroad track, and railroad active warning devices, as well as being very familiar with applicable CPUC, MUTCD and FRA regulations. Additionally, the lead Engineer's or Designer's experience should include significant exposure to the diagnostic processes, safety certification and hazard analyses, inter-disciplinary track and highway geometric design, and rail and traffic signal system design.

1.4 SYSTEM SAFETY PROGRAM PLAN AND SCRRA GENERAL POLICIES

The Manual supports the goals and objectives included within SCRRA System Safety Program Plan (SSPP). The goal of the SCRRA SSPP is the facilitation of a safe work environment through the integration of Standard Operating Procedures (SOPs), System Safety Standards (such as this Manual) and FRA/APTA (American Public Transportation Association) Audit recommendations. Consideration will be given to incorporating critical safety elements of this Manual into the SOP's within the SSPP.

SCRRA Board Resolutions 91-3 and 98-21 in Appendix H provide SCRRA's high level Board Policies with regard to high-rail grade crossings. Aside from section and paragraph headings and table and figure descriptions within the Manual, SCRRA general policy statements supporting the intent of Board Resolutions appear as *italicized dark blue* text. Although these are not recommended design practices and standards, as defined in the following paragraph, they are policies the lead Engineer should endeavor to adhere to during the design of highway-rail and pedestrian-rail grade crossings.

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1.5 ESSENTIAL DESIGN PRACTICES, STANDARDS, AND DEVIATIONS

SCRRA intends to apply the recommended design practices and standards provided in this Manual when a significant physical change is proposed, or occurs, to an existing highway-rail grade crossing, including motor vehicle highway and non-motor vehicle pedestrian and bicycle approaches.

In addition, SCRRA will apply the recommended design practices and standards included in this Manual when a significant change in use is proposed, or occurs, to the highway-rail grade crossing; especially changes in use resulting in significant increases in vehicle, pedestrian, bicycle, and train traffic, or changes in traffic patterns.

Examples of changes in traffic patterns would include: the installation of a new left-turn lane near the highway-rail grade crossing approach; installation of new traffic signals on an adjacent intersection; or the opening of a new passenger rail station near an existing highway-rail grade crossing. It is not intended that the requirements in the Manual be applied retroactively to existing highway-rail grade crossings absent any proposed major physical or use changes, nor should they in the absence of an appropriate level of funding.

Recommended design practices and standards identified in the Manual, and listed in Table 1-2, are those considered most essential to enhancing and reducing the hazards at highway-rail grade crossings. Aside from section and paragraph headings, and table and figure descriptions, these **essential recommended design practices, standards, and policies** are called out in the Manual in **Boldface** type.

Deviations from the recommended design practices and standards listed in this Manual will require the approval of the SCRRA Director of Engineering and Construction, or a Change Review Committee, designated by the Director. The Change Review committee will typically include a cross section of senior managers representing the SCRRA Civil, Signal, Safety and Rail Crossings groups.

The current procedure for requesting a deviation from the Manual is to prepare and then request the necessary approvals by completing the SCRRA Design Exception form. This form is included in the Manual as Appendix F. The request should be signed and sealed by a registered engineer, preferably the lead Engineer for the highway-rail grade crossing design.

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Table 1-2. SCRRA Essential Design Practices, Standards and Policies

Section	List of Essential Design Practices, Standards and Policies
2.5.1	Maintenance costs for exit gate systems, if used solely for establishing a quiet zone, shall be addressed in the C&M Agreement and shall not be funded by the SCRRA.
3.1.2	All private highway-rail grade crossings shall be subject to the recommended design practices and standards included in the Manual and applied to permanent highway-rail grade crossings.
3.1.4	Relocated or temporary highway-rail grade crossings shall be subject to the recommended design practices and standards included this Manual and applied to permanent highway-rail grade crossings.
3.2	Modifications of all highway-rail grade crossings or proposals for new highway-rail grade crossings shall be subject to the CPUC approval process.
3.5.1	Active warning devices shall be installed 15 feet from the centerline of the track, as measured from the center of the mast, at new or existing highway-rail grade crossings. A design deviation may be requested for active warning devices installed less than 15 feet; in no case shall an active warning device be installed less than 12 feet from the centerline of the track.
3.5.2	For skewed crossings, highway active warning devices shall be installed perpendicular to the highway 15 feet from the centerline of the track, as measured from the tip of the gate. If the geometry of the highway-rail grade crossing precludes installing the gates at 15 feet, then a design deviation may be requested to place the device closer to the crossing, but in no case less than 12 feet.
3.5.2	When a right-angle highway-rail grade crossing cannot be achieved due to physical constraints, the interior angle shall be designed as close to 90 degrees as practical, but shall not be less than 75 degrees.
3.5.4	The AASHTO WB-65 semi-tractor-trailer shall be used as the highway-rail grade crossing and grade crossing approach highway “design vehicle” for horizontal highway geometry.
3.5.5	The horizontal and vertical geometry of the approach highways and adjacent intersections (immediately upstream and downstream of the highway-rail grade crossing) shall safely accommodate all anticipated traffic movements and required clearances of the highway “design vehicle”.
3.5.10	Vertical curves within the highway at a highway-rail grade crossing shall be avoided.
3.5.10	At multiple track highway-rail grade crossings, the tops of the rails for all tracks shall be in the same plane.
3.5.10	The highway vertical profile grade at lip of gutter pan should be 0% within 10 feet of the centerline of the nearest track and the grade can be increased to 1.11% up to 37.50 feet from the centerline of the nearest track. Beyond 37.50 feet from the centerline of the nearest track, the grade on the approach to the highway-rail grade crossing shall be minimized, with due respect for low-ground-clearance vehicles, to allow maximum acceleration by heavy trucks.
3.5.10	Highway-rail grade crossing vertical profiles shall be analyzed with the Low-Ground Clearance Vehicle template, to determine the clearance for this vehicle type. The Low–Ground Clearance vehicle template has a nominal six (6) inch ground clearance. Highway-rail grade crossings should provide a minimum clearance of three (3) inches between the street surface and the lowest point on the Low-Ground Clearance vehicle template.

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3.5.10	In the event site conditions do not allow for the design to meet the Low-Ground Clearance vehicle template, a design exception may be requested to allow a W10-5 low-ground-clearance sign (as specified in the CA MUTCD) to be installed on each approach to the highway-rail grade crossing sufficiently in advance to allow the vehicles to turn around in advance of the highway-rail grade crossing.
3.5.13	If the railroad geometry and facilities in the vicinity of the highway-rail grade crossing do not meet current SCRRA standards, or the railroad facilities are not in acceptable condition, the railroad should be reconstructed to correct any deficiencies.
3.5.16	Highway-rail grade crossings shall not be less than 24 feet wide and in addition shall be of a width not less than the traveled approach portions of the adjacent sections of the highway including usable shoulders, sidewalks, or pedestrian pathways.
3.5.16	A vehicle entering the footprint of the highway-rail grade crossing should have an unimpeded means of clearing the crossing.
3.6.1	Raised median islands shall be used on both approaches to the highway-rail grade crossing to constrain undesirable traffic movements, such as driving around the automatic crossing gates or making U-turns in the vicinity of the highway-rail grade crossing.
3.6.1	On each approach to the highway-rail grade crossing the raised median shall begin 10 feet from the centerline of the nearest track. The end of the median adjacent to the highway-rail grade crossing shall be square, with a six (6) inch radius on the corners.
3.6.2	The preferred minimum length of the median as measured from the highway-rail grade crossing gate shall be 100 feet. A design deviation may be requested where the 100 feet is unobtainable, but in no case shall the median be less than 60 feet. The width of the median shall be nine (9) feet if a warning device is installed in the median and four (4) feet if no warning device is installed in the median. The minimum width of the median may be two (2) feet with the approval of SCRRA and the local highway agency. Raised median curbs shall be eight (8) inches.
3.6.3	Trees, shrubbery, and similar view obstructing landscaping are not allowed on highway approaches within 100 feet of a highway-rail grade crossing. Low maintenance stamped concrete, pavers, or other hardscape materials shall be the standard landscape treatment for median islands and sidewalk approaches.
3.7	Driveways (private or public) located within 100 feet of the nearest highway-rail grade crossing active warning gate are strongly discouraged. Driveways within 100 feet of highway-rail grade crossings shall be removed or appropriately reconfigured to achieve safety objectives.
3.7	Driveways adjacent to a highway-rail grade crossing which require vehicle reversing (backing) movements shall not be allowed and the local highway agency shall prohibit the reversing movements.
3.7	The design and actual usage of the driveway shall preclude the movement of vehicles over the tracks while ingressing or egressing the driveway.
3.7	Special traffic signage shall be installed to control undesirable traffic movements, especially reverse or slow movements into or out of driveways near tracks.
3.8	Sidewalks and pavement approaches to the highway-rail grade crossing shall be constructed using hot mix asphalt concrete between the zero curb line and the panels.
3.9	Vehicle parking within 100 feet of the highway-rail grade crossing, as measured from the furthest automatic warning device from the tracks, shall be prohibited.
3.12.2	For intersections within 100 feet of a highway-rail grade crossing with multiple main tracks, an exit gate shall be installed to prevent left turn movements accessing the track area.

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3.13	Pedestrian crosswalks parallel and adjacent to highway-rail grade crossings are strongly discouraged.
3.15.4	During the preemption hold interval, the traffic signal indications shall prevent vehicles from moving toward the track area.
3.15.4	A blank-out, changeable message sign, appropriate highway signal indication, or other similar control shall be used to prohibit turning movements toward the highway-rail grade crossing during preemption.
3.15.5	In case there is an existing left-turn lane and it is not provided with a signal head equipped with protected left-turn arrow, the traffic signal shall be modified to provide a protected left-turn arrow, or a blank-out sign.
3.15.5	A left-turn lane pocket configuration extending across the tracks is not allowed.
3.15.6	The use of a Standard No. 9-A cantilever for a pre-signal is not allowed.
3.15.7	In all cases, pre-signal poles shall be positioned so as to maintain visibility of the railroad flashing lights.
3.15.8	The farside intersection signal heads shall be equipped with programmed-visibility heads or louvers to restrict visibility of the intersection signal displays to drivers at the pre-signal stop line.
3.15.14	Backup or standby power systems shall be required at all traffic signals interconnected with railroad signals.
3.16.4	Limited service shall be used for traffic signals interconnected to SCRRA active warning devices.
3.16.5	The Los Angeles Department of Transportation "(LADOT) Railroad Preemption Worksheet" should be used to calculate the duration of the queue clearance interval.
4.1	Pedestrian treatments shall be installed at pedestrian grade crossings in accordance with the Pedestrian-Rail Grade Crossing Design Consideration Flowchart in Figure 4-2.
4.5	ADA must be incorporated into the overall design for pedestrian-rail grade crossings.
4.6	Pedestrian-rail grade crossing active warning devices shall be installed 15 feet from the centerline of the track, as measured from the center of the mast at new or existing crossings. A design deviation may be requested for active warning devices installed less than 15 feet, but in no case shall an active warning device be installed less than 12 feet from the centerline of track.
4.7.1	At stations, track centers shall be a minimum of 18 feet but not more than 25 feet to accommodate a center track fence.
4.10.3	Station pedestrian-rail grade crossings shall provide "full pedestrian treatments" (signage, channelization, active pedestrian warning devices with gates, and swing gates) and fencing, and shall not cross more than two (2) tracks.
4.10.3	Station pedestrian-rail grade crossings shall be installed approximately 60 feet from the ends of the station platform, and include full pedestrian treatments.
4.10.3	New pedestrian-rail grade crossings in the middle of platforms shall not be allowed.
4.10.4	New pedestrian-rail grade crossings shall not be allowed unless one or more existing pedestrian-rail or highway-rail grade crossings are closed.
4.11	"Full pedestrian treatments" shall include signage, markings, channelization, fencing, active warning devices with gates, and swing gates.
4.11	The process in Section 4.11 and Figure 4-2 shall be used to determine the designs of pedestrian-rail grade crossings and appropriate warning treatments.
8.3	LRT (Light Rail Transit) tracks located adjacent to SCRRA highway-rail and pedestrian-rail grade crossings shall be analyzed as a joint system. If the combined number of SCRRA and LRT tracks exceeds three (3), a grade separation shall be constructed.

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8.6	The height of the fence within 150 feet of highway-rail grade crossings shall be four (4) feet. The height of the fence in the balance of the right-of-way shall be at least six (6) feet.
9.1	Highway agency and its contractors shall comply with the rules and regulations contained in the current editions of the SCRRA documents during construction of the project.
9.4	When a highway-rail grade crossing exists either within, or in the vicinity of, a temporary traffic control zone, lane restrictions, flagging, or other operations shall not be performed in a manner that would cause vehicles to stop on the railroad tracks unless a law enforcement officer or qualified flagger is provided at the highway-rail grade crossing to minimize the possibility of vehicles stopping on the tracks.
10.1	Highway agency shall independently inspect the preempted traffic signals intersection a minimum of every three (3) months, and shall report the results of this inspection to SCRRA.
10.2	The highway-rail grade crossings with preempted traffic signals shall be jointly inspected on a semi-annual basis.
10.3	Any changes to railroad or highway traffic conditions discovered during routine inspection and tests shall be reported to each party.

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1.6 MANUAL CHANGES AND UPDATES AND THE MANUAL EFFECTIVE DATE

The various sections of the Manual, as dated in the lower right hand footer of each page, supersede all prior dated sections, Office Standards, Special Orders, and other directives relating to material covered. Revisions and updates to the Manual will be posted on the Metrolink website: Manual users shall be solely responsible for frequently checking for updates to ensure the latest version is being used when performing design or related work on SCRRA highway-rail grade crossings. The Manual is available on the SCRRA Website: www.metrolinktrains.com. The user shall ensure the latest version of the Manual, inclusive of any and all changes and updates, is being utilized. **The effective date of this Manual is June 30, 2009.**

1.7 SCRRA POLICY ON NEW HIGHWAY-RAIL GRADE CROSSINGS

The SCRRA Board (Board) has passed Resolution 91-3 and Resolution 98-21 pertaining to the establishment of a new highway-rail grade crossing on the SCRRA system. *SCRRA policy, in concert with State and National policy, strongly discourages the construction of new highway-rail grade crossings and seeks to reduce the number of active highway-rail grade crossing by promoting grade separation or closure of existing highway-rail grade crossings.* In accordance with Resolution 98-21, a new, additional highway-rail grade crossing is not allowed unless the member agency of SCRRA sponsors the request to construct it and the Board approves the request. This resolution also requires the member agency to sponsor the closure of existing highway-rail grade crossing(s) in order to open a new highway-rail grade crossing, so there will be no net increase in the number of highway-rail grade crossings on SCRRA's commuter rail system. These resolutions are attached as Appendix H. Any new highway-rail grade crossings shall be consistent with the recommended design practices and standards in this Manual and are subject to CPUC approval.

1.8 REFERENCE STANDARDS

The most current editions of the following standards, codes, specifications, and guidelines shall be consulted in the design of highway-rail grade crossings:

Primary References

- The California Manual on Uniform Traffic Control Devices (CA MUTCD), issued by the California Department of Transportation (Caltrans)
- California Public Utilities Commission General Orders (CPUC GO)
- California Public Utilities Code (PU Codes)
- Code of Federal Regulations (CFR), Title 23 and Title 49
- SCRRA Documents:
    - Design Criteria Manual (specifically, the Signal Design Criteria and Standard Drawings related to highway-rail grade crossings)
    - Design Procedures Manual
    - Landscape Design Guidelines
    - Form 36: Right-of-Way Encroachment Approval Procedures
    - Rails with Trails Guidelines

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- Quiet Zone Implementation Guidelines and Procedures
- Track Maintenance and Engineering Instructions
- CADD Standards
- CADD Users Guide
- SCRRA Temporary Traffic Control Guidelines for Highway-Rail Grade Crossings
- Grade Separation Guidelines

Secondary References

- The Communications & Signals Manual issued by the American Railway Engineering and Maintenance of Way Association (AREMA).
- The Document for Railway Engineering issued by the American Railway Engineering and Maintenance of Way Association (AREMA).
- The Portfolio of Track Work Plans (companion volume to the Railway Engineering Manual), issued by the American Railway Engineering and Maintenance of Way Association (AREMA).
- Green Book Standard Specifications for Public Works Construction by the Green Book Committee, BNI Building News.
- Railroad-Highway Grade Crossing Handbook, U.S. Department of Transportation, Federal Highway Administration.
- The California Highway Design Manual published by the California Department of Transportation (Caltrans).
- Caltrans Standard Plans (current edition).
- A Policy on Geometric Design of Highways and Streets, published by the American Association of State Highway and Transportation Officials (AASHTO).
- Local jurisdictions' standards and design criteria for traffic signals.
- Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 4th edition, 2006 Interim, published by the American Association of State Highway and Transportation Officials (AASHTO).
- National Electrical Code.
- Preemption of Traffic Signals near Railroad Crossings, Institute of Transportation Engineers (ITE).
- Standard Plans for Public Works Construction, American Public Works Association.
- WATCH-Work Area Traffic Control Handbook.
- Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).

Detailed drawings related to highway-rail grade crossings, pedestrian crossings and signal system automatic warning devices are included in SCRRA Engineering Standards. Highway-rail grade crossing drawings are included in Appendix J. These standards are not intended to replace existing regulatory standards or to be a substitute for engineering knowledge, experience and judgment, but are requirements, which are most important for safe construction, maintenance and operation of highway-rail grade crossings. Since the actual design will typically be site specific, information shown on these standard drawings will be modified as necessary in close collaboration with SCRRA and as per diagnostic process mentioned in Section 7.3. SCRRA completed design drawings and contract documents for 53 highway-rail grade crossings on SCRRA's Orange and Olive Subdivisions in Orange County in 2008-09. Some of the

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sample drawings are include in Appendix K for reference purposes. SCRRA requires the highway agencies to prepare drawings and cost estimates showing highway, rail, traffic signal, pedestrian, signal and other details similar to the one shown on the sample drawings. Table 1-3 shows the list of SCRRA's Engineering Standards related to highway-rail grade crossing which are included in Appendix J.

Table 1-3. List of Highway-Rail Grade Crossing Engineering Standards

STANDARD NO.	TITLE
ES4001	Highway-Rail Grade Crossing – Typical Sections
ES4002	Pedestrian Swing Gate Details
ES4004	Pedestrian Crossing Design Consideration Table
ES4005	Pedestrian Barricade and Metal Hand Railing Details
ES4011	Pedestrian Facilities at Vehicle Crossing - Entrance Gates Only
ES4012	Pedestrian Facilities at Vehicle Crossing - Entrance/Exit Gates
ES4013	Pedestrian Facilities at Acute Angle Vehicle Crossing - Entrance Gates Only
ES4014	Pedestrian Facilities at Acute Angle - Vehicle Crossing Entrance/Exit Gates
ES4015	Pedestrian Facilities at Obtuse Angle - Vehicle Crossing Entrance Gates Only
ES4016	Pedestrian Facilities at Obtuse Angle - Vehicle Crossing Entrance/Exit Gates
ES4017	Typical Pedestrian Treatment Details
ES4018	Pedestrian Crossing Only
ES4031	Pedestrian/Vehicle Crossing Adjacent to Station
ES4032	Pedestrian Crossing Adjacent to Station
ES8308	Typical Gate Assemblies for Pedestrian Treatments at Vehicle Crossings
ES8309	Typical Gate Assemblies for Pedestrian and Bicycle Only Crossings
ES8350	Location Plan Flashing Light Signals with Entrance Gates
ES8355	Typical Location Plan Flashing Signals with Entrance and Exit Gates
ES8260	Typical Location Plan Cantilever Flashers with Entrance Gates
ES8365	Typical Location Plan Cantilever Flashers with Entrance and Exit Gates
ES8370	Typical Location Plan Flashing Light Signals with Gates and Median
ES8375	Typical Location Plan Flashing Light Signals with Entrance and Exit Gates and Median
ES8380	Typical Location Plan Cantilever Flashers with Entrance Gates and Median
ES8385	Typical Location Plan Cantilever Flashers with Entrance and Exit Gates and Median
ES8390	Typical Location Plan Pedestrian Flashing Light Signals with Gates Crossing Configuration
ES8405	Vital Placement for Inductive Loops used with Exit Gates

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1.9 RECOMMENDATIONS OF SCRRA SAFETY PEER REVIEW PANEL

In January 2009, SCRRA received a report authored by the Metrolink Commuter Rail Safety Peer Review panel entitled *Metrolink Commuter Rail Safety Peer Review Panel: Final Report*. The subject and purpose of the report was to discuss the observations and recommendations made by this Panel.

The Panel was appointed by a SCRRA Board Ad Hoc Subcommittee, and consisted of experts and professionals from across the nation having diverse backgrounds and experience from commuter rail and passenger agencies, private companies, and members of academic society.

The report recommended the implementation of an "Enhanced Safety Action Plan", which included short, medium, and long term safety and operational enhancements to the Metrolink System. This plan was organized into eight (8) key issues, the fifth being Infrastructure and Maintenance. The importance of this report to the Manual is that Grade Crossing Safety Enhancements and Sealed Corridors were included in the recommendations for Infrastructure Safety Improvements. Recognizing the importance of grade crossing to overall system safety, the Panel report recommended that SCRRA continue with its programs to enhance safety at highway-rail grade crossings and continue programs to either close or grade separate existing grade crossings.

1.10 ACKNOWLEDGMENTS

The Manual is the compilation of the collective effort of a Technical Advisor Group (TAG) formed specifically to develop the Manual. This TAG contributed hundreds of hours of effort over a period of one and one half years.

Several members of the TAG conducted inspections of other rail properties, regionally and across the nation, and met with rail engineering and safety professionals with regard to highway-rail grade crossing design practices and standards. The TAG consisted of highly experienced individuals, with expertise in the fields of: highway-rail grade crossing design and construction; railroad track design and construction; railroad signal design and construction; highway and roadway design and construction; traffic engineering; traffic signal design and construction; and safety and risk management.

Grateful recognition is due to the TAG members listed below and to the following contributors:

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2.0 FEDERAL, STATE, AND LOCAL REGULATIONS AND SCRRA AGREEMENTS

2.1 INTRODUCTION

Regulatory agencies include those agencies with jurisdiction for modifications to existing and private highway-rail grade crossings, as well as any proposed new high-rail grade crossings. Highway-rail grade crossing closures, quiet zones, and grade separation are issues that may arise and need to be addressed in detail in conjunction with the modification of an existing or proposed new highway-rail grade crossing.

With regard to modifications and changes to existing SCRRA highway-rail grade crossings, the primary regulatory agency and point of contact will always be the California Public Utilities Commission (CPUC). Federal Railroad Administration (FRA) applicable regulations will also apply, especially in those instances when a quiet zone may be under consideration. The principal CPUC General Orders (G.O.) associated with highway-rail grade crossings are G.O. 72, 75 and G.O. 88.

In accordance with CPUC and Federal Highways Administration (FHWA) guidelines, representatives from both railroad and local highway agencies are required to participate with the regulatory authorities in all activities that involve the analysis and design of proposed changes to a highway-rail grade crossing. The SCRRA will be the regulatory point of contact, in the lead railroad role for highway-rail grade crossings it maintains and operates. The most likely other agency to be involved with highway-rail grade crossings will be the highway owner, which in most cases is the local City who owns and maintains the grade highway-rail grade crossing highway approaches. In some cases the highway owner is the County, or the State of California (Caltrans). Other stakeholders in the process of modifying, closing an existing highway-rail grade crossing or proposing a new highway-rail grade crossing may include local emergency services (fire and police), school districts, neighborhood associations, and nearby businesses. Technical, funding, or planning representatives from SCRRA's member agencies (METRO, OCTA, VCTC, SANBAG, and RCTC) will often participate in the grade crossing planning, design, and funding process, and will also participate in discussions with the regulatory agencies.

2.2 FEDERAL

The SCRRA rail network is regulated by the FRA. FRA regulations are included in 987 pages in Title 49, Parts 200 to 299 of the Code of Federal Regulations (CFR). The purpose of the FRA is to: enforce rail safety regulations; administer railroad assistance programs; conduct research and development in support of improved railroad safety and national rail transportation policy; and consolidate government support of rail transportation activities.

The FRA maintains the federal database of highway-rail grade crossings in the United States. A US DOT crossing number identifies each public highway-rail grade crossing in the United States. This crossing number is a random number issued by the FRA to the operating railroad. The number consists of seven characters: six numerical characters, followed by one letter (e.g. 123456A). The US DOT and the FRA use this number to maintain the federal crossing inventory. The available statistics applicable to a particular crossing can be found by using its number to search the federal database for accident, traffic, and basic inventory information. The user should verify this information with the

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railroad and the highway agency. The operating railroad is responsible for supplying current information regarding the highway-rail grade crossing to the FRA. Information regarding a particular highway-rail grade crossing can be found on the FRA website at http://www.fra.dot.gov.

The "Safety" page on the FRA website includes information regarding the regulation of highway-rail grade crossings, as well as important database information. To access the desired information, the user is able to search using a number of different queries.

The principal FRA regulations associated with highway-rail grade crossings in CFR Title 49 are Parts 222 (*"locomotive hours at public highway-rail grade crossings")* and Part 234 ("*grade crossing signal system safety*"). Other Parts in CFR 49 also apply.

In October 2008, the Rail Safety Improvement Act of 2008 was passed and includes new provisions addressing grade crossing safety. The FRA also sponsors a number of programs promoting safety, inspection, highway-rail grade crossing safety, and trespass prevention. Additional details regarding FRA programs involving safety can be found on the FRA website.

2.3 STATE

In the State of California, the CPUC has regulations and standards governing many aspects of highway-rail grade crossings design, construction, maintenance and operation. The Rail Crossing Engineering Section (RCES) of the CPUC is the primary point of contact within the CPUC for issues involving highway-rail grade crossings. General Orders (GO) of the CPUC, combined with regulations contained in the California Manual on Uniform Traffic Control Devices (MUTCD), defines the requirements for application of warning devices and traffic control. In most cases, the highway agency has jurisdiction on the highway and pedestrian approaches outside of the crossing, in accordance with the standards of the agency and the CA MUTCD.

The criteria established within the GOs are developed through a formal rule-making process to become part of the standards. Each GO has a revision letter appended to the end of its number. For example, GO 88-B refers to revision B of GO 88. In the Manual, revision letters that apply to each referenced GO have been omitted, with the understanding that the user will refer to the latest version.

The construction or modification of any new highway-rail grade crossing must comply with regulatory process defined in Sections 1201–1205 of the Public Utilities Code. Construction of improvements cannot begin until authorization is received from the CPUC.

In most cases, the modification of an existing highway-rail grade crossing shall be applied for through the CPUC GO 88 process.

Each highway-rail grade crossing in California has a CPUC-issued identification number. Unlike the random nature of the FRA numbering system, the CPUC numbers identify the railroad, branch or subdivision, milepost, and nature of the track (main or branch track, pedestrian crossing, etc.).

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By way of example, 101VY-123.40-A is a typical CPUC highway-rail grade crossing number array. That number is obtained as follows:

- 101 = Railroad company/authority
- VY = Subdivision and branch/line (see Table 2-1)
- 123.40 = Railroad milepost (to the nearest hundredth of a mile)
- A, B, C, D = Type of crossing (see Table 2-2 below)

Each SCRRA highway-rail grade crossing CPUC number uses "101" as a prefix, assigned by CPUC on behalf of SCRRA.

The following tables list some of the more commonly used highway-rail grade crossing identifiers:

Table 2-1. SCRRA Subdivision Identifiers

Subdivision	Identifier
River	RI
Valley	VY
Ventura	VE
Orange	OR
Olive	OL
Montalvo	MO
San Gabriel	SG
Pasadena	PA

Table 2-2. Highway-Rail Grade Crossing Type Identifiers

Overhead (RR under), grade-separated highway over railroad	A
Underpass (RR over), grade-separated highway under railroad	B
Spur Track (Industry Track) crossing	C
Pedestrian crossing	D
Railroad-railroad crossing (track over track)	T
Private crossing	X
Overhead pedestrian crossing	AD*
Underpass pedestrian crossing	BD*
Pedestrian private crossing	DX*
Overhead pedestrian private crossing	ADX*
Underpass pedestrian private crossing	BDX*

*Note: these are combinations of the above identifiers

As another example of how these identifiers are generated, crossing number 101VY–18.40-A is an overhead highway crossing in the SCRRA Valley Subdivision at mile post 18.40.

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2.4 LOCAL

A highway agency or municipality has ownership and jurisdiction over the highway and highway approaches on which the highway-rail grade crossing is located. While agreements between the railroad and the agency define the physical limits of the highway-rail grade crossing, the approach highways and sidewalks outside of those defined limits falls under the jurisdiction of the local highway agency. (The lead Engineer is referred to CPUC General Order 72 for a description of these limits).

In carrying out this responsibility, the highway agency will define the engineering standards and design practices to be used in the development of designs for the highway-rail grade crossing's approaches. These standards must be minimally compliant with CA MUTCD and should be consistent with the recommended design practices and standards in this Manual.

Highway-rail grade crossing and the associated highway and sidewalk approaches typically involve the intersection of three transportation modes (rail, motor vehicles, and non-motor vehicle pedestrian and bicycles) and include overlapping ownership, design, construction, maintenance, operation and funding responsibilities. SCRRA, the local highway owner, CPUC, and other stakeholders should develop highly-collaborative approaches when planning and designing highway-rail grade crossing modifications or new crossings.

The local highway agency responsible for the highway approach is strongly encouraged to follow the recommended design practices and standards included within this Manual when planning and designing physical or use changes to the highway-rail grade crossing and highway approaches.

2.5 SCRRA

2.5.1 Construction and Maintenance Agreements

The construction or modification of a highway-rail grade crossing within the SCRRA system shall be defined in one or two agreements, ultimately culminating in a Construction and Maintenance (C&M) Agreement. In many cases, the C&M Agreement will be preceded by simple letter agreements to initiate the review of the conceptual plans, followed by more detailed agreements addressing complicated design services support, including scope development, full design, cost estimates and schedules, construction, and construction management of the railroad improvements.

Typical changes and modifications that trigger SCRRA review and approval to highway-rail grade crossings include, but are not limited to: 1) interconnections with traffic signals and traffic signal preemption; 2) making enhancements to the railroad warning devices or traffic controls associated with the highway-rail grade crossing; 3) performing significant highway or pedestrian pathway work on the approaches and within the limits of the crossing; 4) adding pedestrian or bicycle paths parallel and intersecting grade crossings; 5) creating significant changes in the use of the highway approaches; and 6) implementing other projects that may have a significant effect on the traffic patterns over the crossing.

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Before any designs can be finalized and before any construction work can begin, an agreement that includes a detailed work description must be executed by the SCRRA and the highway agency and any other outside parties participating in the funding. This agreement specifies the method of payment; assigns responsibility for design, construction, funding, and maintenance; provide cost estimates of the SCRRA work; and specifies the form, duration, and amount of insurance and liability. The CPUC must also approve the final design of changes and modifications to existing crossings before any construction can begin.

It is important that the development of documents outlining the responsibilities of the parties and SCRRA begin early, as the design is established in order to properly define the scope of work and the project cost. A new C&M Agreement will typically supersede any existing railroad/highway agency agreement. The SCRRA will require that the funding for SCRRA services associated with highway-rail grade crossing agreements (including "Letter Agreements", "Design Service Agreements" or "Design Scoping and Cost Estimating Agreements" as well as C&M Agreements) be deposited with SCRRA upon execution of the Agreement and in advance of SCRRA incurring any costs.

The maintenance costs associated with automatic warning devices is partially reimbursed by the CPUC for highway agencies and shall be in accordance with CPUC Code Section 1202.2**. Maintenance costs for exit gate systems, if used solely for the establishing a quiet zone, shall be addressed in the C&M agreement and shall not be funded by the SCRRA.**

SCRRA has developed standard specifications that define the responsibilities of contractors working within rights-of-way operated and maintained by SCRRA. The local highway agency should be familiar with these specifications and include these specifications with any bid documents associated with the work at the crossing. A list of these specifications can be found in Appendix I.

All project maintenance shall be conducted in accordance with the C&M Agreement. The local highway agency shall maintain and keep in a state of good repair the traveled way, fence, gates, signs, traffic signals, landscaping, and any other improvements within the jurisdiction and ownership (or easement, or licensed traveled-way) of the local highway agency.

As part of the C&M agreement, the highway agency shall notify SCRRA within five (5) working days in advance of any maintenance activity, and within thirty (30) days in advance of any construction activity to occur within the right-of-way. The highway agency shall be required to reimburse SCRRA the actual cost and expense incurred by SCRRA for all services and work performed in connection with the project, including a computed surcharge representing SCRRA's costs for administration and management.

2.5.2 Right-of-Entry Agreements

In order to perform work on a right-of-way operated and maintained by SCRRA, Right-of-Entry Agreements are required. For temporary or short-term uses of rights of way (such as surveying activities and shallow geotechnical investigations), the highway agency or contractor is required to submit SCRRA Form 5 – Indemnification and Assumption of Liability Agreement. For projects involving construction on the SCRRA rights-of-way, the highway agency or contractor is required to enter into SCRRA Form 6 – Temporary

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Right-of-Entry Agreement. This agreement defines the nature of the work, the flagging requirements, and the appropriate safety measures that must be in place during the work. This includes all work within the right-of-way, from initial design through the completion of construction. Additionally, the movement of oversize vehicles over SCRRA-maintained and operated crossings requires a fully executed Form 4 – Agreement for Moving Oversized Loads Over Highway-Rail Grade Crossings**.** These agreements are available on the SCRRA website: http://www.metrolinktrains.com.

2.5.3 Rights-of-Way

In many cases, railroad right-of-way is maintained by SCRRA and owned in fee by the member agencies. Highway agency or third party projects that affect the right-of-way must be coordinated with SCRRA's Rail Corridor C&E Division.

The modification of highway-rail grade crossings often has an effect on the existing right-of-way defining the crossing. At the earliest stages of the project, the highway agency shall determine the status of the right-of-way within the limits of the project in order to properly identify the encumbrances and issues related to the crossing.

In cases where additional right-of-way is required, the lead Engineer shall develop the appropriate mapping and right-of-way definitions in accordance with SCRRA or local highway agency standards for the proper definition of the right-of-way. The application of the SCRRA's recommended design practices and standards in this Manual to a highway-rail grade crossing will likely result in the need for additional right-of-way for sidewalks, highways, or other civil features related to safety enhancements.

In most cases, the local highway agency takes the lead for land acquisition. The lead Engineer shall properly define the necessary right-of-way, provide legal descriptions, and work with SCRRA's right-of-way administrator and the member agency's real estate department, as needed, to forward the process of property acquisition, easement, or preparing a license agreement.

In some cases, SCRRA also shares the right-of-way with the BNSF Railway Company (BNSF) and the Union Pacific (UPRR) railroads; in order to perform work on their rights-of-way, approval shall be obtained from BNSF and UPRR.

The procedures for applying for right-of-way encroachment, and the appropriate forms, are found in Form 36: Right-of-Way Encroachment Approval Procedures, available on the SCRRA website: http://www.metrolinktrains.com.

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3.0 HIGHWAY-RAIL GRADE CROSSINGS

3.1 SCOPE

Highway-rail grade crossings are the level intersection of the railroad and highway, and include the pedestrian and bicycle paths located at the edges and parallel to the highway. Pedestrian-rail grade crossings and station pedestrian-rail grade crossings are discussed in Section 4.0. Grade separations are discussed briefly in Section 5.0. Section 3.0 of the Manual provides the design process for modifying and enhancing existing highway-rail grade crossings or constructing new highway-rail grade crossings.

3.1.1 Public Highway-Rail Grade Crossings

A “public highway-rail grade crossing” is a highway-rail grade crossing where the highway is owned or controlled by a highway agency; typically a city, in some cases a county, and less frequently, the state. “At-grade” public highway-rail grade crossings, also known as “level” crossings or highway-rail crossings, are locations where trains intersect with other modes of transportation, including motor vehicles, pedestrians, and bicycles.

In this Manual, the term “highway-rail grade crossing” will be used to mean rail-grade crossing, rail crossing, at-grade crossings, or crossing. The term “highway” will be used to mean highway, road, or approach road. Over 250 (about 90%) of SCRRA’s highway-rail grade crossings are categorized as public highway-rail grade crossings. The chance for conflict at public highway–rail grade crossings increases whenever other modes of transportation are introduced which cross the traveled path of a train, and when the quantity or volume of modal traffic increases. To reduce the chance of such a conflict, appropriate warning treatments are applied to warn motorists and pedestrians of oncoming trains. Highway-rail grade crossing conflicts at public highways are exacerbated by the fact that highway agencies have a very limited ability to control the public’s access to highway-rail grade crossings; additionally, the nature of railroad operating mode does not permit trains to stop in same relative distances as vehicles.

In order to provide a consistent and minimal level of safety at the highway-rail grade crossing, warning devices such as vehicle gates, flashing lights, bells, signage, and pavement markings are incorporated to warn users of the highway-rail grade crossing of approaching trains.

3.1.2 Private Highway-Rail Grade Crossings

A “private crossing” is a highway-rail grade crossing in which the highway is owned or controlled by a private party, and not a highway agency. Private highway-rail grade crossings are generally on highways or at driveways to private property, and in many cases are used by the general public essentially in the same manner as a public crossing. A private party normally owns the highway on at least one side. SCRRA has 29 private highway-rail grade crossings.

In many cases, the SCRRA, or the member agency, provides access to private property under an agreement between the property owner and the SCRRA or SCRRA member agency. These highway-rail grade crossings are prevalent where a highway or driveway is used as the means of accessing private property that would otherwise be landlocked.

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A private highway-rail grade crossing might also be used in cases where the railroad intersects private property and the private crossing allows necessary access between sections of the private property divided by the railroad (e.g., farmland). **All private highway-rail grade crossings shall be subject to the recommended design practices and standards included in this Manual and applied to permanent highway-rail grade crossings.**

3.1.3 Temporary Construction Highway-Rail Grade Crossings (Not Public)

Temporary Construction Crossings (TCC's) are normally gated and locked when not in use. Access across these TCC's is controlled with a SCRRA Employee-in-Charge (EIC). Temporary highway-rail grade crossings are generally not open to the public and shall be designed and constructed in accordance with SCRRA Engineering Standards.

3.1.4 Temporary Highway-Rail Grade Crossings (Used by the Public)

A temporary highway-rail grade crossing occurs when the highway, railroad, or both is temporarily relocated to a new location which, in turn, triggers the temporary relocation of the highway-rail grade crossing. The temporary relocations can be due to the construction of a grade separation, a railroad line change, or some other major construction project that requires the relocation of road or track. **Relocated or temporary highway-rail grade crossings shall be subject to the recommended design practices and standards included in this Manual and applied to permanent highway-rail grade crossings.**

3.2 DESIGN PROCESS AND SEQUENCE

The process and sequence for the proper analysis and design of highway-rail grade crossing improvements involves several different engineering disciplines. A typical highway-rail grade crossing design considers motorist and pedestrian behaviors; civil, railroad, and railroad signal design; safety and risk analysis; land use and right–of-way issues; and traffic engineering. This design process involves all engineers and other professionals that participate in the ultimate configuration of the crossing, from the onset of design. The process is outlined in Figure 3-1.

Modifications of all highway-rail grade crossings or proposals for new highway–rail grade crossings shall be subject to the CPUC approval process. The lead Engineer and grade crossing design team should allow ample time [at least four (4) weeks] in the design process for Conceptual (5%) and Pre-Final Design (90%) diagnostic reviews by the engineering team (refer to Section 7.1). All major elements including rail and traffic signals of highway-rail grade crossing project shall be at the at the 90% design, calculation, and cost estimate level before conducting the per-final design level diagnostic review. After Pre-Final Design diagnostic reviews, the ultimate scope of the project, and ultimately the final design scope, will be "locked down". These diagnostics are an important part of the design process and require the necessary input from stakeholders to determine the effectiveness of the changes proposed. The lead Engineer shall take note of the results of the diagnostic meetings, record all comments, and incorporate the appropriate recommendations and changes into the design.

The design of the highway-rail grade crossing shall be circulated for review and approval within SCRRA in order to include the input received from various departments or

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functional groups (signals, track, safety, rail crossings) within SCRRA, as well as from the highway agency and CPUC. The overall functionality and effectiveness of a highway-rail grade crossing will be determined by operational and maintenance needs as well as engineering design needs. The input from these departments early in the engineering process will provide important information that will affect the overall design of the crossing.

A design checklist (included in Appendix G) shall be signed by the lead Engineer in responsible charge for the design of the project. This checklist defines what is expected to have been included in each of the design level submittals, and shall be submitted with each of the submittals listed below (Figure 3-1). In general:

- Project Concept & Design Criteria (5% Design) submittal will incorporate alternative design solutions, program cost estimates, and confirm the correctness and completeness of project objectives.
- Preliminary Design (30% Design) submittal will advance the design to a level in which: potential impacts to the environment, utility lines, and drainage can be identified; traffic and pedestrian counts, and traffic engineering analysis have been performed; construction staging and sequencing alternatives have been identified; and a preliminary engineer's estimate can be provided. A C&M Agreement may be developed and executed between the 30% and 90% designs.
- Pre-Final Design (90% Design) submittal will incorporate comments and advance the design to the near-completion level. Designs for all functional areas, including highway, traffic signals, track, signals, utilities, and right-of-way, will be complete and coordinated. Specifications will be complete. The design scope should be "locked down" at this point: the method of contract delivery has been indentified; the roles and responsibilities of the parties have been determined; and a realistic funding plan developed. Only minor revisions should be expected in response to comments at this level.

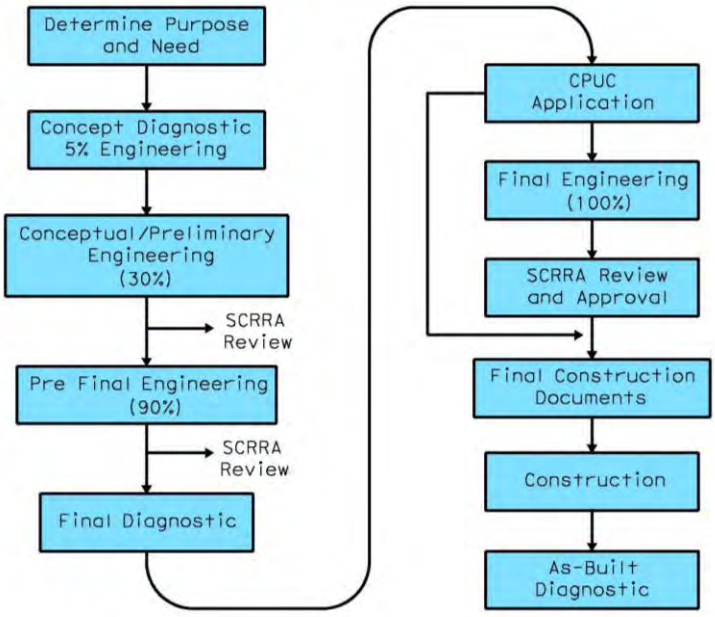

Figure 3-1. Highway-Rail Grade Crossing Design Process Flow Chart

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- Final Design (100% Design) submittal incorporates the 90% comments and will be signed and sealed by a registered engineer. Comments may be generated and must be incorporated and resubmitted to SCRRA as Camera Ready Bid Documents.
- Typically, the railroad signal (active warning device) design for a highway-rail grade crossing shall be performed by a different design firm than the civil design. The signal design will often lag the civil design. However, at the Pre-Final (90%) and Final (100%) design phases, both civil, traffic and signal design shall be at the same level of completion.

3.3 DESIGN GOALS

The purpose of, and need for, modifications should be set forth at the start of design. This will form the basis for the overall design of the project, and set the ultimate goals for the improvements. The purpose and need of the project will be developed taking into consideration the overall safety aspects of the crossing, as well as its operational and maintenance aspects. In addition, the source of funding for the improvements and the stakeholders involved with the project, will be defined. The evolving diagnostic process may define changes in those ultimate goals; changes that will ultimately decide the outcome of the final design.

The initial efforts of design should include:

- Meetings and field surveys with SCRRA engineering and maintenance staff to determine existing conditions of the project site that could affect the construction of the proposed improvements.
- Determination and understanding of the site characteristics and condition of the railroad facilities, including track, crossing and wayside signals, and the railroad operating environment. The railroad operating environment (train speeds, number of trains, train operating patterns) may have a major impact on the means and methods for construction and any proposed permanent grade crossing improvements. In addition, the designer will need to coordinate with SCRRA ongoing maintenance planning so the construction schedule can be incorporated into a regular maintenance cycle. This is especially important in areas where heavy rail traffic minimizes opportunities to remove tracks from service in order to perform construction and maintenance.

3.4 HIGHWAY

The overall design of the highway (and requirements for that design) is set forth in the requirements of the highway local agency, in AASHTO Publications, in the CA MUTCD, and in Caltrans Standards, and should be consistent with the requirements of this Manual. In most cases, the local highway agency has jurisdiction over the highway outside of the immediate area of the crossing. SCRRA and local highway agency jurisdictional limits are generally defined by the CPUC and covered in more detail in the C&M Agreement, which may include project plans as an attachment.

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The overall quality of the constructed highway, including approaches to the highway-rail grade crossing and the crossing itself, shall be sufficient to:

- Provide for a smooth ride for motor vehicles at the posted speed limit.
- Provide a smooth ride for train traffic at the designated operating speeds.
- Provide safe stopping sight distances (in keeping with the posted speed limit).
- Provide adequate highway and adjacent intersection capacity so motor vehicles do not queue on the tracks.
- Include the display of appropriate signing and pavement markings.
- Provide for ADA compliance for pedestrians through the crossing.
- Minimize sight restrictions for highway users and train operations.
- Allow highway users to make clear and informed decisions that will minimize traffic congestion and the potential for conflict.
- Comply with the recommended design practices and standards in this Manual.

On the approaches to a crossing, the characteristics of the approach highway, traffic signals, and approach sidewalks are an extremely important factor in developing an effective design of the highway-rail grade crossing.

3.5 HIGHWAY AND RAILROAD GEOMETRY

As applied to highways and railroads, geometry defines the horizontal and vertical curvature. “Crossing geometry” refers to the geometrical relationship between the alignment of the crossing highway and the railroad. This horizontal relationship may be perpendicular or skewed. The vertical relationship may include “humps” or vertical curves. These geometric features can affect traffic operations at a highway-rail grade crossing. Additional geometric concerns, such as the elevation of the crossing and the number of lanes, are also aspects that shall be considered during the crossing design. The geometric characteristics of a highway-rail grade crossing greatly affect the visibility of the crossing to users—drivers and pedestrians alike.

Sight distance requirements for horizontal and vertical highway geometry are defined within the Caltrans Highway Design Manual, the AASHTO Manual, the CA MUTCD, and local jurisdiction standards and regulations. The lead Engineer shall consider sight distance to the extent possible within the design of the highway-rail grade crossing geometry, and provide horizontal and vertical curves that provide an unobstructed view of the crossing. The horizontal and vertical alignment of the highway at the approaches to the crossing—in addition to the geometry of the railroad tracks—are major factors in considering sight distance and overall visibility at the crossing.

3.5.1 Perpendicular Highway Rail Crossings

It is SCRRA’s policy, wherever possible, to have the highway intersect the railroad at a right angle. This highway-rail grade crossing configuration allows the most direct and consequently the safest means of traversing the railroad right-of-way. An example of a perpendicular highway-rail grade crossing is shown on Figure 3-2. **Active warning devices shall be installed 15 feet from the centerline of the track, as measured from the center of the mast, at new or existing highway-rail grade crossings. A design deviation may be requested for active warning devices installed less than 15 feet; in no case shall an active warning device be installed less than 12 feet**

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from the centerline of the track. This standard is consistent with the requirement of Part 8 of the CA MUTCD. The benefits of a perpendicular highway-rail grade crossing are as follows:

- Shortest route across the crossing.
- Minimal gate-arm length and standard location for placement.
- Decreased opportunity for the wheels to become caught in the flangeways.
- Improved visibility of the highway-rail grade crossing and all approaches.

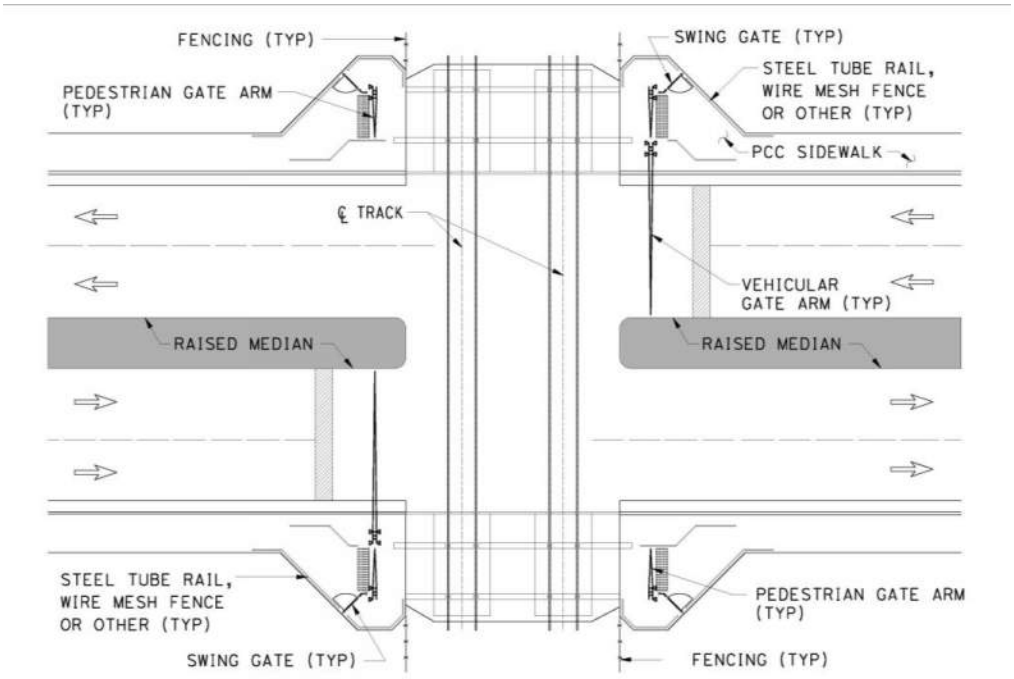

Figure 3-2. Perpendicular Highway-Rail Grade Crossing

3.5.2 Skewed Crossings

A skewed highway-rail grade crossing is one where the highway intersects the track at an obtuse or acute angle. Although this is undesirable highway-rail grade crossing geometry, it is often unavoidable. Examples of the standard layouts for a skewed highway-rail grade crossing are shown in Figures 3-3 and 3-4. A skewed highway-rail grade crossing has several undesirable characteristics, including the following:

- Increased time for motor vehicles and pedestrians to traverse the highway-rail grade crossing.
- Highway geometry may significantly increase the length of the gate arms.
- Often results in undesirable locations of highway-rail grade crossing devices that may affect overall design needs.
- Increased opportunity for wheels to become caught in the flangeways.

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A skewed highway-rail grade crossing injects additional complicating factors into the design of the overall highway-rail grade crossing. Where standard applications of warning devices may be applied without modification at perpendicular highway-rail grade crossings, the skewed highway-rail grade crossing requires adapting the standard design to meet the highway-rail grade crossing angle. For example, an angled crossing may require that gates be placed at greater, nonstandard distances from the track in order to provide proper lane coverage.

For skewed crossings, highway active warning devices shall be installed perpendicular to the highway 15 feet from the centerline of the track, as measured from the tip of the gate. If the geometry of the highway-rail grade crossing precludes installing the gates at 15 feet, then a design deviation may be requested to place the device closer to the crossing, but in no case less than 12 feet. Application of these recommended design practices and standards: 1) minimizes the length of gate arms; and, 2) directs the lights on the arm along the highway approaches for maximum visibility.

When a right-angle highway-rail grade crossing cannot be achieved due to physical constraints, the interior angle shall be designed as close to 90 degrees as practical, but shall not be less than 75 degrees. Refer to Figure 3-5. In instances where this crossing geometry is satisfied, the gates shall be installed perpendicular to the highway-rail grade crossing highway. If the angle of skew must be less than 75 degrees due to physical constraints, then the lead Engineer shall develop highway-rail grade crossing geometry that will maximize the angle of skew.

A significant challenge that arises with modified, nonstandard gate placement is the increased travel distance for pedestrians and vehicles traversing the highway-rail grade crossing. The lead Engineer shall develop configurations that will minimize pedestrian travel time between pedestrian gates over the highway-rail grade crossing, while providing pedestrian gate arms of minimum length.

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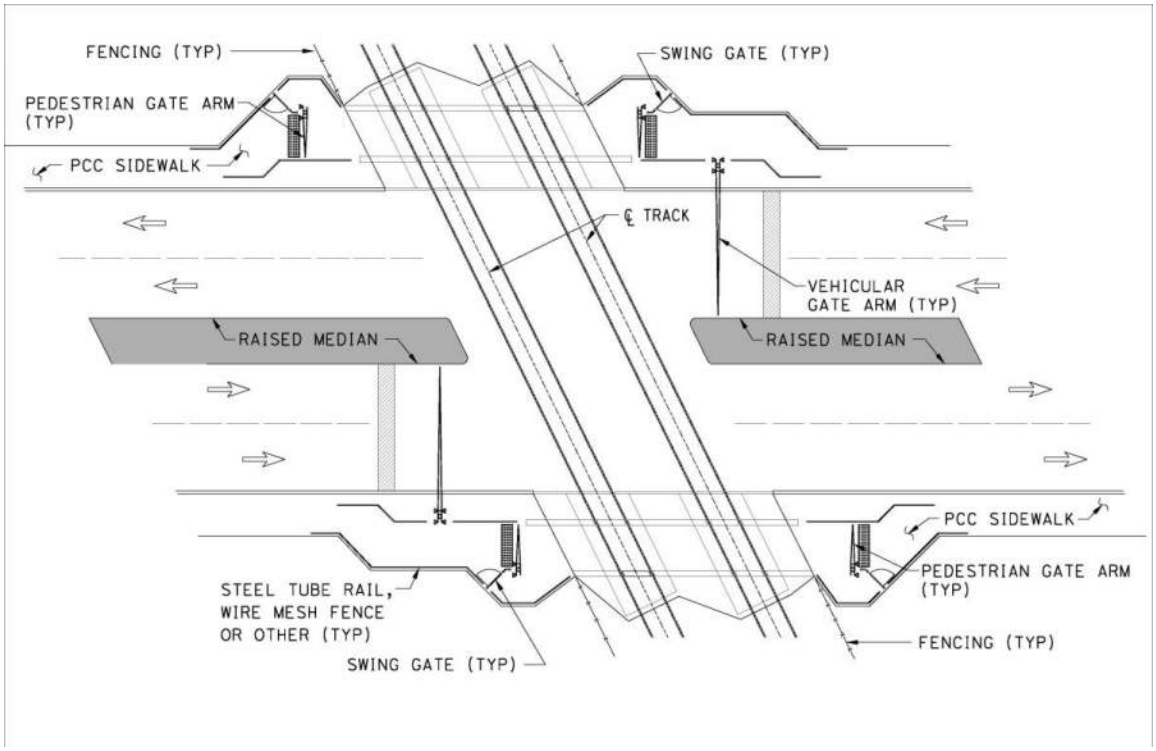

Figure 3-3. Skewed Highway-Rail Grade Crossing (Left)

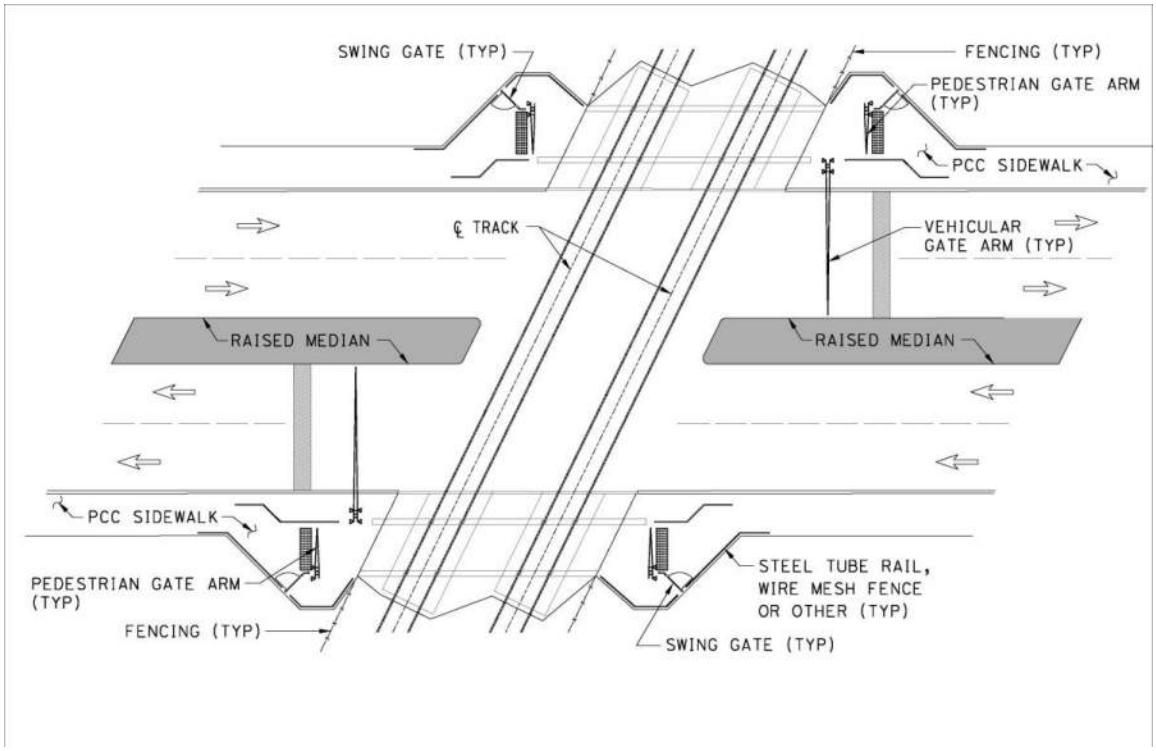

Figure 3-4. Skewed Highway-Rail Grade Crossing (Right)

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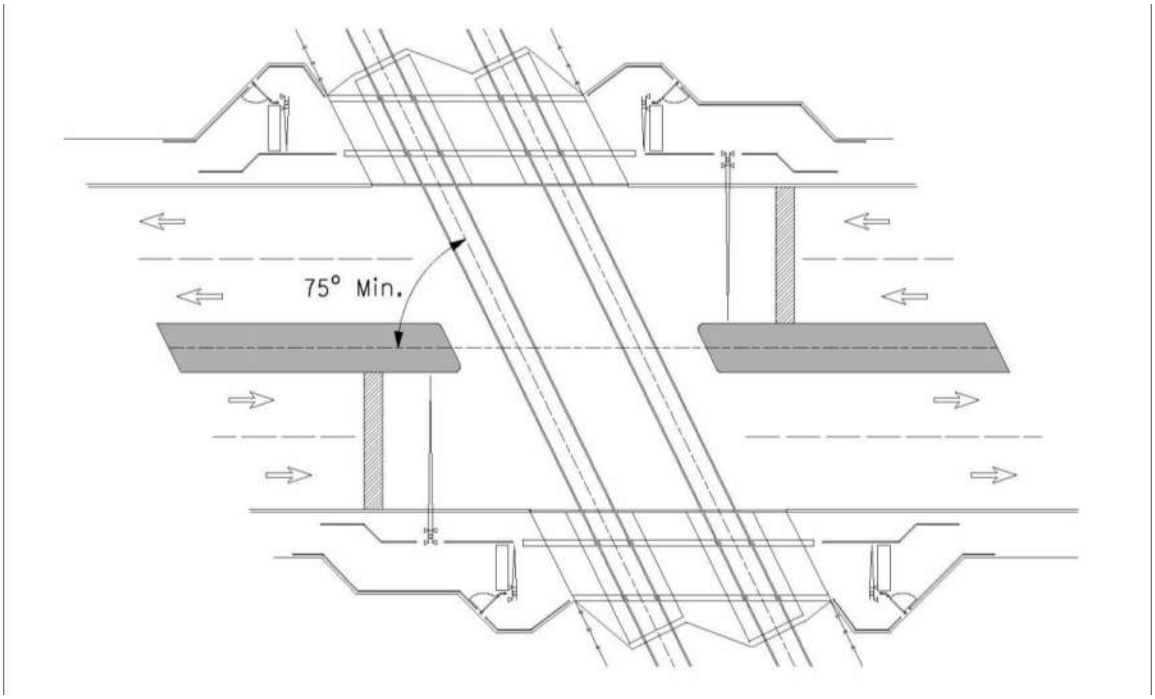

Figure 3-5. Skewed Highway-Rail Grade Crossing (75º Minimum)

3.5.3 Highway Features

Several highway features pertinent to the design of the highway-rail grade crossing must be considered to ensure an adequate design. The design should satisfy both the physical and operational needs of the railroad, as well as accommodate the traffic (vehicles, pedestrians, and bicycles) that must safely traverse the highway-rail grade crossing.

3.5.4 Highway Design Vehicles

Both the highway horizontal and vertical design criteria and the design vehicles are established by the highway agency having jurisdiction over the highway. The highway shall be designed to accommodate the largest, longest, and lowest ground clearance vehicle that may be expected to traverse the highway-rail grade crossing. These vehicles and their characteristics are discussed in the AASHTO publication, A Policy on Geometric Design of Highways and Streets. In the State of California, and for SCRRA highway-rail grade crossings, **the AASHTO WB-65 semi-tractor-trailer shall be used as the highway-rail grade crossing and grade crossing approach highway "design vehicle" for horizontal highway geometry.** In locations where the WB-65 vehicle may be prohibited access, the mere posting of signage restricting access to a highway-such as "NO TRUCKS OVER 3 AXLES," or "NO TRUCKS OVER 3 TONS" should not be considered a reliable deterrent for controlling truck access to a SCRRA highway-rail grade crossing.

3.5.5 Horizontal and Vertical Alignment

The horizontal and vertical geometry of the approach highways and adjacent

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intersections (immediately upstream and downstream of the highway-rail grade crossing) shall safely accommodate all anticipated traffic movements and required clearances of the highway "design vehicle".

3.5.6 Proximity to Adjacent Traffic Outlets

The design must consider highway-rail grade crossing proximity to highway intersections, alley intersections, and driveways, and the impact of adjacent traffic control devices on the operation of the highway-rail grade crossing. Refer to Section 3.7 for additional information on driveways.

3.5.7 Drainage and Highway Pavement

The proper drainage of both the highway and the track structure shall be considered by the lead Engineer at all phases of the design. Improper drainage can lead to failure of the track and highway approach pavement, which in turn may affect the overall operations. The pavement near (within 50 feet) of the highway-rail grade crossing should be "overdesigned", or designed to very high standards in terms of thickness, materials, and quality of construction, in order to minimize or prevent the need for any future repairs or rehabilitation. The need for a high quality low maintenance pavement is particularly important where any exit gate loop detectors are located. Pavement repairs and rehabilitation in the vicinity of a highway-rail grade crossing can be extremely difficult, disruptive (both to motor vehicle users and to the railroad), and costly to perform, due to the difficulty of coordinating traffic outages of both the highway and railroad.

3.5.8 Design Speed

The design speed of the highway-rail grade crossing highway is usually equal to or slightly above the posted speed limit that is set by the highway agency. If the posted speed limit cannot readily be determined, the lead Engineer shall inquire with the highway agency having jurisdiction over the highway-rail grade crossing.

3.5.9 Highway Horizontal Curves

Horizontal curves in the highway may create overall visibility challenges to the lead Engineer. In many cases, enhancements to highway-rail grade crossings do not include modifications to the existing highway geometry. Often, the existing highway geometry cannot be modified due to limited right-of-way or other reasons. In cases where existing horizontal curves in the highway affect the overall visibility of the crossing, the lead Engineer shall adhere to the following process:

- Analyze the sight distance through the approaches to the highway-rail grade crossing, utilizing highway design criteria defined by the agency having jurisdiction over the highway.
- Determine the feasibility of highway geometry modifications to enhance the visibility of the crossing.
- Use additional signaling or warning devices as necessary to mitigate the effects of horizontal curves on visibility.

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3.5.10 Vertical Profile of the Highway and Highway Cross Slope

The vertical profile of the highway is often a matter of matching existing topography with the surface geometry of the railroad highway-rail grade crossing. As a result, the lead Engineer may be faced with several design options in order to design an efficient and safe crossing. The following items shall be followed when developing the design of the vertical profile of the highway:

- The approach grades to the highway-rail grade crossing shall be minimized. This is to allow large vehicles to properly accelerate and quickly traverse the highway-rail grade crossing when stopped before the highway-rail grade crossing warning gates. A steeper slope on the approaches to the highway-rail grade crossing will increase the acceleration time and, consequently, will increase preemption time for the traffic signals related to the crossing. Refer to Section 3.16 for additional information on preemption.
- Transitions of the edges of the pavement (EP) of the highway-rail grade crossing approach highway—from the normal 2% cross-fall (from centerline to EP) to the track grade (where both halves of the highway will slope to match the profile of the railroad track)—shall be accomplished in a manner that will not create any abrupt changes in the highway. The lead Engineer shall follow the guidelines shown in Figure 3-6 below, to determine the length of the EP transition.

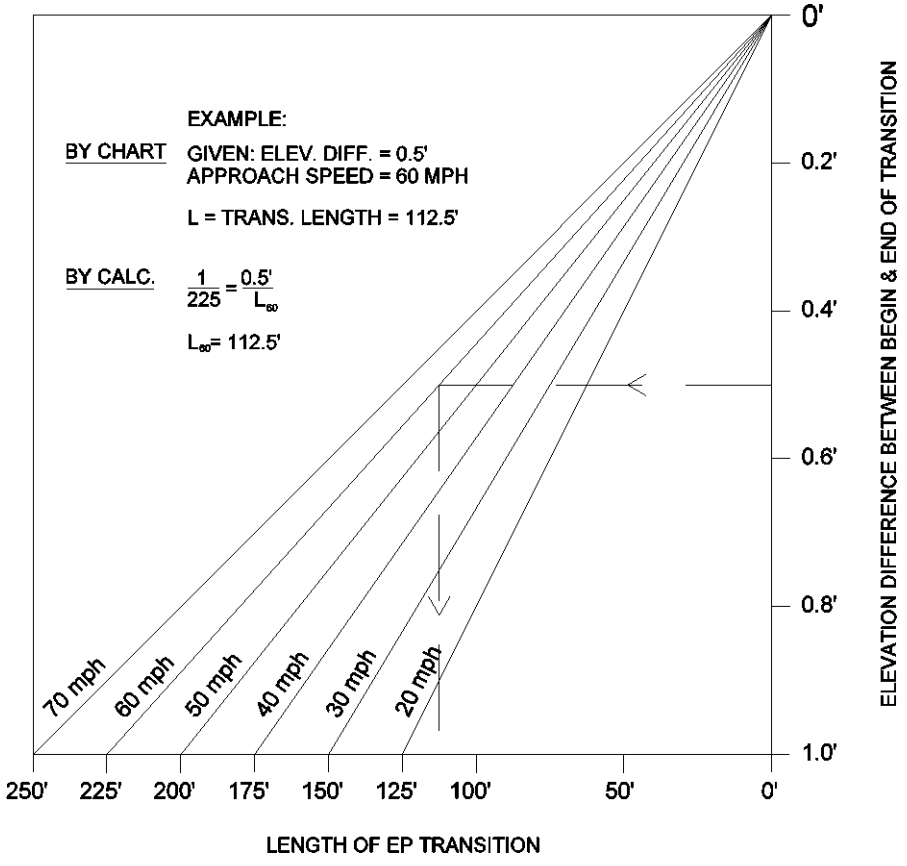

Figure 3-6. Rate of Change in Pavement-Edge Elevation Changes for Highway Approaches to Highway-Rail Grade Crossings

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- **Vertical curves within the highway at a highway-rail grade crossing shall be avoided.** If necessary, vertical curves should meet the Stopping Sight Distance requirements from the Caltrans Highway Design Manual, or AASHTO publication entitled A Policy on Geometric Design of Highways and Streets.
- **At multiple track highway–rail grade crossings, the tops of the rails for all tracks shall be in the same plane.** If this is not accomplished, traffic tends to slow down as vehicles traverse the uneven crossing. This leads to traffic congestion and increases the probability of rear-end accidents. In addition, highway-rail grade crossing maintenance requirements shall increase due to the need for pavement repairs adjacent to, and in between, highway-rail grade crossing panels.
- The intersection of highway and railroad shall be as level as possible.
- **The highway vertical profile grade at lip of gutter pan should be 0% within 10 feet of the centerline of the nearest track and the grade can be increased to 1.11% up to 37.50 feet from the centerline of the nearest track. Beyond 37.50 feet from the centerline of the nearest track, the grade on the approach to the highway-rail grade crossing shall be minimized, with due respect for low-ground-clearance vehicles, to allow maximum acceleration by heavy trucks.** This shall minimize track clearance time during railroad preemption. Refer to Figure 3.7, SCRRA's Engineering Standard for additional details. Refer to Section 3.16 for additional information on preemption and highway-rail grade crossing profiles.

Often railroad tracks are constructed higher than adjacent topography to allow for proper drainage of the railroad right-of-way. This often creates a vertical "hump" at the crossing. A severe hump may cause long and low trailers to become "high centered" and stranded on the crossing. A similar situation can occur with long limousines. These trapped vehicles, in addition to stopping or slowing traffic, represent a serious hazard to both the vehicle and train.

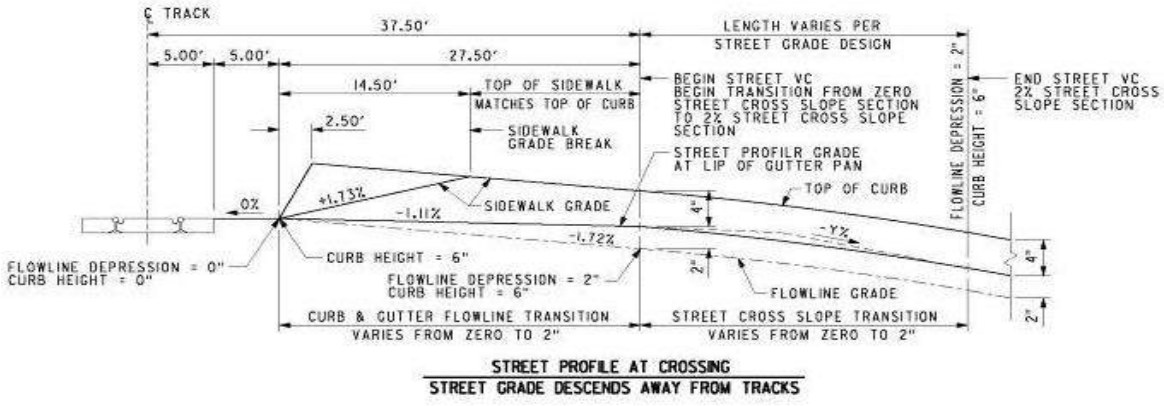

Figure 3-7. Highway Profile at Highway-Rail Grade Crossing

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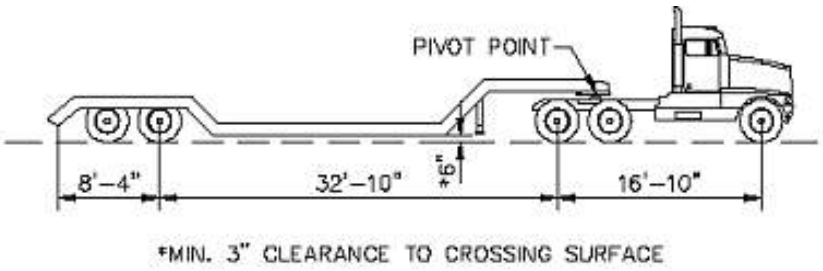

Figure 3-8. Low-Ground Clearance Vehicle Template for Highway-Rail Grade Crossing Design

Highway-rail grade crossing vertical profiles shall be analyzed with the Low-Ground Clearance Vehicle template to determine the clearance for this vehicle type. The Low–Ground Clearance Vehicle template has a nominal six (6) inch ground clearance. Highway-rail grade crossings should provide a minimum clearance of three (3) inches between the street surface and the lowest point on the Low-Ground Clearance Vehicle template as illustrated in Figure 3-8.

The lead Engineer shall consider all vehicles that may utilize the crossing, regardless of posted signs prohibiting access.

In the event site conditions do not allow for the design to meet the Low-Ground Clearance Vehicle template, a design exception may be requested to allow a W10-5 low-ground-clearance sign (as specified in the CA MUTCD) to be installed on each approach to the highway-rail grade crossing sufficiently in advance of the crossing to allow low-ground clearance vehicles to turn around in advance of the highway-rail grade crossing. In addition, as recommended by the CA MUTCD, a supplemental message such as “Ahead,” “Next Crossing,” or “Use Next Crossing” (with appropriate arrows) should be placed at the nearest intersecting road where a vehicle can detour, or at a point on the highway wide enough to permit a U-turn.

3.5.11 Truck Turning Capabilities

The design of improvements to the highway-rail grade crossing must factor in all likely means by which the highway-rail grade crossing shall be traversed. The design shall allow for the free movement of all motor vehicles throughout the highway-rail grade crossing envelope. In areas of heavy industrial use, truck size becomes a factor in the design of the crossing. A truck that cannot safely traverse the highway-rail grade crossing represents a serious hazard. The lead Engineer shall apply the turning radius of the horizontal design vehicle for all allowable turning movements, superimposing the vehicle wheel paths and vehicle body paths onto the proposed highway-rail grade crossing design. This shall be accomplished using the appropriate truck turning templates or computer software.

Figure 3-9 shows the turning radii of the AASHTO WB-65 design vehicles when traversing a designed crossing. As shown in this figure, the characteristics of the design

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vehicle have a major impact on the design of the crossing. Issues such as curb return radius, the placement of medians, and the overall length of medians are affected by this placement. In some cases, the installation of additional traffic control methods such as medians may not be recommended if the median (or other control measure) would prevent a design vehicle from safely exiting the crossing.

The lead Engineer shall provide for the effective egress of the typical design vehicle traversing the crossing. The following steps shall be followed during the design process:

- Determine the proper design vehicle expected to traverse the crossing. The design vehicle to be used as a standard is determined by the municipality having jurisdiction over the highway.
- Analyze the turning radius of this vehicle within the proposed design.
- Mitigate the effects of insufficient turning radius within the design.
- The lead Engineer shall demonstrate the effects of the vehicle turning radius and the swept path of the wheels and body of the vehicle on the overall design of the highway and crossing.

3.5.12 Turning Radius Mitigations

The following mitigations shall be implemented to cope with an inadequate turning radius:

- Where multiple lanes are involved, provide for a truck's unobstructed movement, so it may easily traverse the highway-rail grade crossing without being impeded by cross traffic. This may include the use of additional traffic signaling to control cross traffic.
- Consider revising a proposed median design to allow the free movement of the truck. This may require a request for design exception.

Figure 3-9 demonstrates an effective mitigation for an inadequate turning radius. In this example, the AASHTO WB-65 design vehicle is unable to remain in the curb lane throughout its right turn after exiting the crossing. The traffic signal at the intersection, which controls both the movement of the vehicle over the crossing and the cross traffic (and therefore the mitigation), was to modify the signal phasing so that the truck has a clear movement path over the highway-rail grade crossing and onto the adjacent street.

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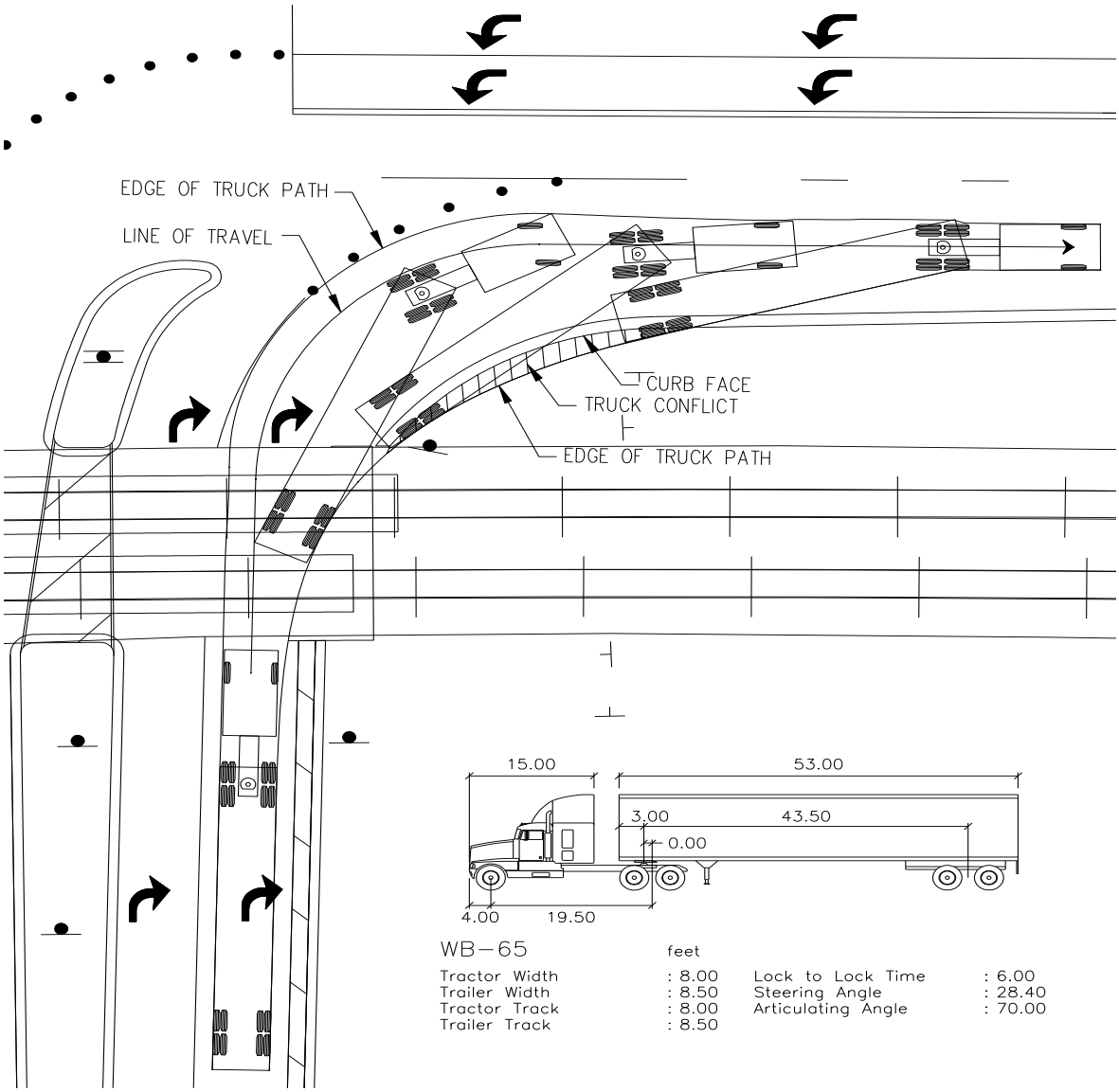

Figure 3-9. Turning Radius of the WB-65 Design Vehicle

3.5.13 Railroad Geometry and Condition of Railroad Facilities

In conjunction with investigating and analyzing the highway geometry in the vicinity of the highway-rail grade crossing, the railroad geometry and condition of the railroad facilities should also be investigated and analyzed to determine compliance with current SCRRA standards and design practices. **If the railroad geometry and facilities in the vicinity of the highway-rail grade crossing do not meet current SCRRA standards, or the railroad facilities are not in acceptable condition, the railroad should be reconstructed to correct any deficiencies.** It is very important to bring the railroad up

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to current standards and good condition as part of the overall grade crossing safety enhancement project: it is extremely difficult and costly to coordinate the simultaneous closure of both the railroad and highway for repair, rehabilitation, and construction activities. The overall objective should be to reconstruct both the highway and railroad elements of the highway-rail grade crossing so major repairs or rehabilitation will not be required for 20 to 30 years. Additional information regarding the design of the railroad tracks and highway-rail grade crossing facilities is included in Section 3.17.

A review and analysis of the railroad geometry is particularly important if the highway-rail grade crossing is located within, or near, a railroad curve; or if other special railroad facilities exist near the crossing such as special trackwork (turnouts and crossovers), a passenger station, or a railroad bridge. Preliminary surveys, aerial photographs, and detailed topographic maps of the grade crossing should extend outward along the railroad alignment for 1000 feet or to the end of any curves in both directions for the crossing. The survey should include: the top of rail of any track(s); the amount and location of superelevation; the beginning and end of any spirals and curves; the distance (every 100 feet) between track centerlines; and the limits of the existing grade crossing surface.

Additionally, the location of special trackwork, station platforms, bridges, wayside signals, signal or communication houses, pull boxes, longitudinal utilities (both surface and underground), and the location of all existing active warning devices should be determined. The mapping accuracy of the railroad facilities should be as accurate as the highway facilities: typically one-inch per 40-foot scale. The SCRRA should also be consulted to determine the likelihood of needing additional track or other railroad facilities, or if SCRRA plans include future tracks or other facilities; the lead Engineer should incorporate these future facilities into the plans.

After the survey of the existing railroad geometry and facilities is conducted, the lead Engineer and SCRRA will perform the necessary engineering and condition analysis to determine the changes and modifications required to bring the railroad facilities into compliance with current standards (and to an acceptable condition).

3.5.14 Highway and Railroad Drainage

All surface drainage along the highway approaches to the highway-rail grade crossing and across the crossing itself shall be channeled away from the highway-rail grade crossing to minimize opportunities for hydroplaning within the highway-rail grade crossing and approaches. In particular, the following conditions shall apply to surface drainage within the area of highway-rail grade crossings:

- All surface runoff within the highway-rail grade crossing shall be collected by appropriate drainage devices outside the limits of the track structure. No surface flow shall be allowed to enter the area of the track structure.
- For all approaches to the highway-rail grade crossing, the lead Engineer shall consider highway cross-fall and cross-slope transition at a nominal 2% to the highway gutter.
- The lead Engineer shall demonstrate sufficient drainage and cross-flow within the design drawings.

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- Highway and track drainage systems shall be continuous within the limits of the crossing.

Poor drainage is the primary cause of track structure and highway pavement failure. In the initial analysis of a crossing, the lead Engineer shall examine the existing conditions to determine the effectiveness of existing drainage and correct any deficiencies, and shall also produce a Hydraulics and Hydrology (H&H) Report, to be reviewed and approved by SCRRA, which studies onsite and offsite flows, and recommends drainage improvements to be incorporated into the project. Table 3-1 below lists possible drainage issues that warrant consideration, but the scope of the improvements should follow the H&H Report.

Table 3-1. Drainage Considerations

Condition	Possible Reason	Solution
Rough crossing	Track settlement and tie or roadbed failure	Reconstruct track structure and improve drainage and roadbed
"Alligator" pavement adjacent to the highway-rail crossing panels.	Poor drainage of highway and insufficient pavement structure	Install additional catch basins. Re-profile highway to affect surface flow. Reconstruct highway with high quality low maintenance pavement
Rough pavement on approaches	Highway structure failing, or in poor condition	Reconstruct highway profile to affect surface flow. Reconstruct highway with high quality low maintenance pavement.

3.5.15 Level of Service

The term "Level of Service" (LOS) is normally used to describe the performance of a road or street in terms of its operational ability to meet traffic volume demands. LOS describes the operational characteristics of the traffic stream, based on qualitative measures of the highway facility. Factors that characterize LOS include vehicle speed, travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. LOS is a mechanism used by highway departments, or local jurisdictions, to determine if a road is operating at ideal, average, or poor efficiency. The LOS relates the quality of traffic service to given traffic volumes. The Highway Capacity Manual defines six levels of service, designated A through F, with A being the highest (free flow) and F the lowest (extreme congestion). The following factors are used to determine LOS:

Highway Factors

- Number and width of lanes
- Exclusive turn lanes
- Lateral clearance
- Horizontal and vertical alignment
- Number of access points (driveways, alleys, side streets, etc.)
- Drainage

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Traffic Factors

- Free-flow speed
- Heavy vehicles
- On-street parking
- Bus stops
- Peak hour factor
- Turning movements

Traffic Control Factors

- Signal phasing
- Signal timing
- Signal cycle length
- Signal coordination
- Pedestrian phasing at crosswalks

Factors other than LOS will affect the overall operation of traffic at a highway-rail grade crossing. For example, a highway may have a LOS of 'A' but also have a downstream driveway that will force traffic to queue back onto the tracks in the event of a right turn into the driveway. To accommodate traffic-related issues, the design of a highway-rail grade crossing should include all aspects affecting the flow of traffic—regardless of LOS.

The LOS is affected by warning devices and signage associated with highway-rail grade crossings. Also, the LOS may directly affect the coordination between traffic signals at adjacent intersections with the highway-rail grade crossing signaling system. Refer to Section 3.14 for additional information.

3.5.16 Traffic Lanes

The following highway-rail grade crossing requirements are contained in General Order 72 of the CPUC:

- **Highway-rail grade crossings shall not be less than 24 feet wide and in addition shall be of a width not less than the traveled approach portions of the adjacent sections of the highway including usable shoulders and sidewalks or pedestrian pathways.**
- Deceleration and acceleration lanes for vehicles required to stop at highway-rail grade crossings should be provided wherever highway agencies determine such lanes are necessary.
- At the time of construction, the surface of the highway shall be installed to conform substantially to the plane of the rails for the entire area between rails, between tracks, and to lines two (2) feet outside the rails.
- Where crossings involve two or more tracks, the top of rails for all tracks are normally in the same plane. The surface of the highway shall be at the same plane as the top of rails for a distance of at least two feet outside of rails for either multiple or single-track highway-rail grade crossings. The top of rail plane shall be connected with the grade line of the highway each way by vertical curves of such length as is required to provide riding conditions and sight distances normally applied to the highway under consideration, per the Caltrans Highway Design Manual or AASHTO publication entitled "A Policy on Geometric Design of Highways and Streets".

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- Approach grades of less than 6% are desirable, but where not reasonably obtainable due to local topographical conditions, the gradients in the vicinity of the rails shall be kept as low as feasible.

Often a highway intersection may be immediately adjacent to the highway-rail grade crossing. It is important that vehicles traversing the highway-rail grade crossing be given a clear avenue of escape after or downstream of the highway-rail grade crossing. To clarify, **a vehicle entering the footprint of the highway-rail grade crossing should have an unimpeded means of clearing the crossing.** In cases where there is an intersection adjacent to the crossing, it may be necessary to add a refuge in the cross-traffic direction to allow a design vehicle to clear the intersection and move onto the cross street without constraining the movement of cross traffic.

3.6 MEDIAN ISLANDS

3.6.1 General

Installing raised medians at the centerline of highway approaches to highway-rail grade crossings is an effective way to discourage gate circumvention or making U-turns in the vicinity of the highway-rail grade crossing. As shown in Figure 3-10, the use of a median island(s) minimizes opportunities for violations by creating a well-defined corridor across the tracks. For a two-gate system, installation of median barriers can reduce violations up to 80%t (source: National Safety Council and National Highway Traffic Safety Administration – Cost-Effectiveness Analysis). In addition, FRA's Final Rule on Use of Locomotive Horns lists gates with median islands, or channelization devices, as an approved supplementary safety measure for a quiet zone.

Raised median islands shall be used on both approaches to the highway-rail grade crossing to constrain undesirable traffic movements, such as driving around the automatic crossing gates or making U-turns in the vicinity of the highway-rail grade crossing.

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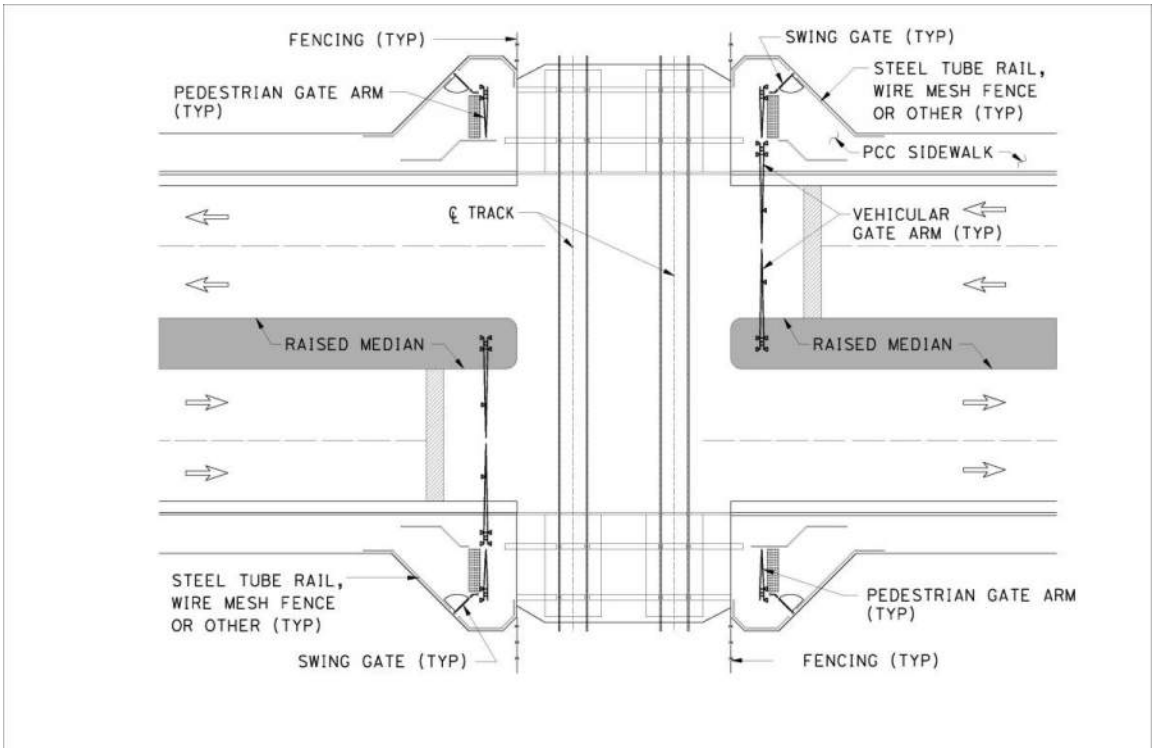

Figure 3-10. Raised Medians at a Highway-Rail Grade Crossing

Criteria for the design of islands is set forth in an AASHTO publication titled A Policy on Geometric Design of Highway and Streets.

Figure 3-11. Effective Use of Medians and Signage

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To be effective, a raised median should be centered on the street between both directions of traffic. **On each approach to the highway-rail grade crossing the raised median shall begin 10 feet from the centerline of the nearest track. The end of the median adjacent to the highway-rail grade crossing shall be square, with a six (6) inch radius on the corners** to discourage motorists from making left or U-turns between the medians. Figure 3-11 shows an effective use of median islands.

3.6.2 Median Islands versus Exit Gates

Two mitigation methods can minimize the opportunities for motorists to violate gates:

- The use of a median of sufficient length and height, preferably 100 feet long (measured from the gate) and eight (8) inches high, to prevent motorists from driving around the lowered gate.
- The installation of exit gates, as discussed later in the Manual, at the crossing, blocking motorists from entering the highway-rail grade crossing when gates are lowered.

The preferred minimum length of the median as measured from the highway-rail grade crossing gate shall be 100 feet. A design deviation may be requested where the 100 feet is unobtainable, but in no case shall the median be less than 60 feet. The width of the median shall be nine (9) feet if a warning device is installed in the median and four (4) feet if no warning device is installed in the median. The minimum width of the median may be two (2) feet with the approval of SCRRA and the local highway agency. Raised median curbs shall be eight (8) inches. The median island shall be continuous throughout its length without any breaks. However, there may be instances where an existing manhole or valve box must remain in its current location. In this case, the median shall be designed to accommodate access to these facilities. The lead Engineer shall consider the elimination of manholes, valve boxes, or other features requiring regular maintenance within the approaches to the highway-rail grade crossing

Table 3-2 can be used in the selection and design of medians:

Table 3-2. Standard SCRRA Applications of Medians

Hazard	Option 1	Option 2	Notes
Adjacent driveways	Medians to extend past driveway	Medians extending past the driveway, and shaped to limit vehicular movements	The use of the median shall effectively control vehicular activity at the driveway
Multiple lanes	Install raised medians for additional highway-rail grade crossing gates	N/A	Medians are mandatory in instances where additional gates and lights are needed for proper lane coverage
Light traffic or rural area	Install raised medians		The use of the median shall effectively control vehicular activity

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Limited highway right-of-way	Install raised medians	Install raised delineators	The installation of medians can require the acquisition of additional highway right-of-way
Insufficient truck turning radius	Extend median to the maximum length that still accommodates truck movements, and consider exit gates	N/A	Truck turning radius may be a defining component on the use of exit gates
Insufficient right-of-way for a raised median	Acquire additional right-of-way for the installation of the raised median	Consider the use of raised delineators, but only if right of way acquisition is not possible.	The installation of delineation between traffic directions may be needed if the acquisition of additional right-of-way is not an option

The primary median width requirement, per CPUC, is that there shall be a minimum horizontal clearance of two (2) feet between the flashing beacon backplate and the face of the curb. The lead Engineer shall plan for future highway uses when considering the ultimate width of the median. The position of the median gate counterweight, when the gate is in the horizontal position, must be considered.

3.6.3 Median Landscaping

In general, **trees, shrubbery, and similar view obstructing landscaping are not allowed on highway approaches within 100 feet of a highway-rail grade crossing. Low maintenance stamped concrete, pavers, or other hardscape materials shall be the standard landscape treatment for median islands and sidewalk approaches.**

3.7 DRIVEWAYS

The location of driveways, alleys, or similar facilities (with respect to the highway-rail grade crossing) can significantly affect the safety associated with highway-rail grade crossing operations. Driveways associated with railroad-highway crossings are defined as nearside or farside.

- A nearside driveway is defined as a driveway that is located on the crossing approach prior to, or upstream of, the crossing. An example of this type of driveway is shown in Figure 3-12.
- A farside driveway is defined as a driveway located beyond, or downstream of, the highway-rail grade crossing as shown in Figure 3-13.

Driveways (private or public) located within 100 feet of the nearest highway-rail grade crossing active warning gate are strongly discouraged. Driveways within 100 feet of highway-rail grade crossings shall be removed or appropriately reconfigured to achieve safety objectives.

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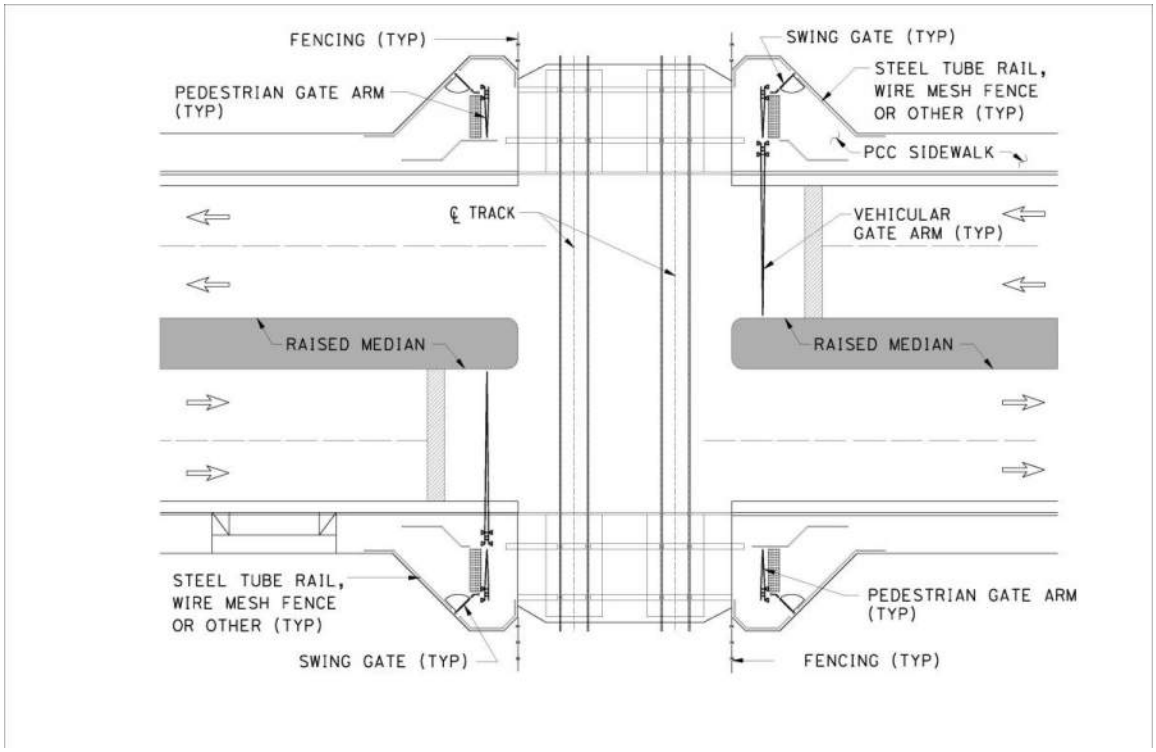

Figure 3-12. Nearside Driveway at Highway-Rail Grade Crossing

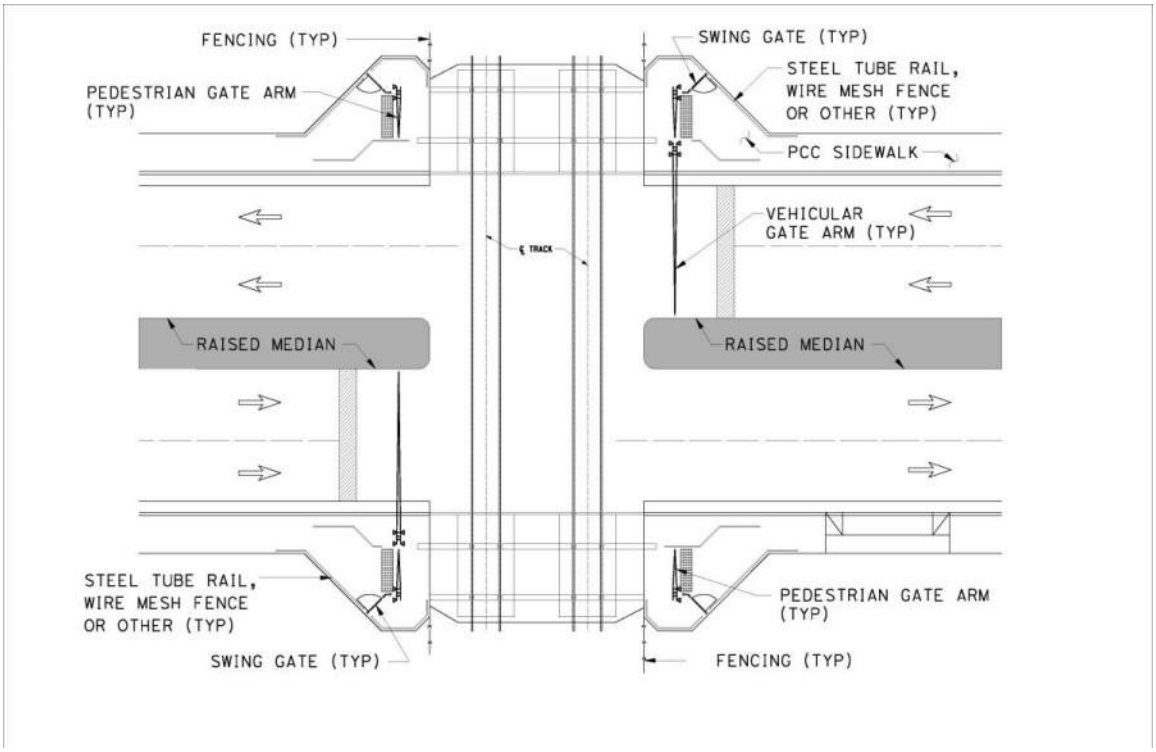

Figure 3-13. Farside Driveway at Highway-Rail Grade Crossing

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In addition to preventing vehicles from driving around gates, well designed medians limit movements out of these driveways, thus minimizing vehicle queuing hazards associated with cross-traffic vehicle movements.

Vehicles entering and exiting a driveway immediately adjacent to a highway-rail grade crossing can affect the traffic flow over that crossing. In particular, vehicles making right or left turns into, or out of, the downstream driveway may force approaching traffic to slow or stop, which may result in queuing over the crossing. Where there is an existing nearside or farside driveway, the first choice is to eliminate the left turn into, and out of, the driveway by providing raised median islands, and using other measures coordinated between the highway agency and the property owner. This shall minimize the opportunity for vehicles to be stopped on the tracks by uncontrolled cross traffic.

Another solution for the mitigation of an existing driveway adjacent to a highway-rail grade crossing is the use of a shaped median that allows for a right turn out of the driveway while eliminating turning movements toward the highway-rail grade crossing. An example of this is shown in Figure 3-14, below:

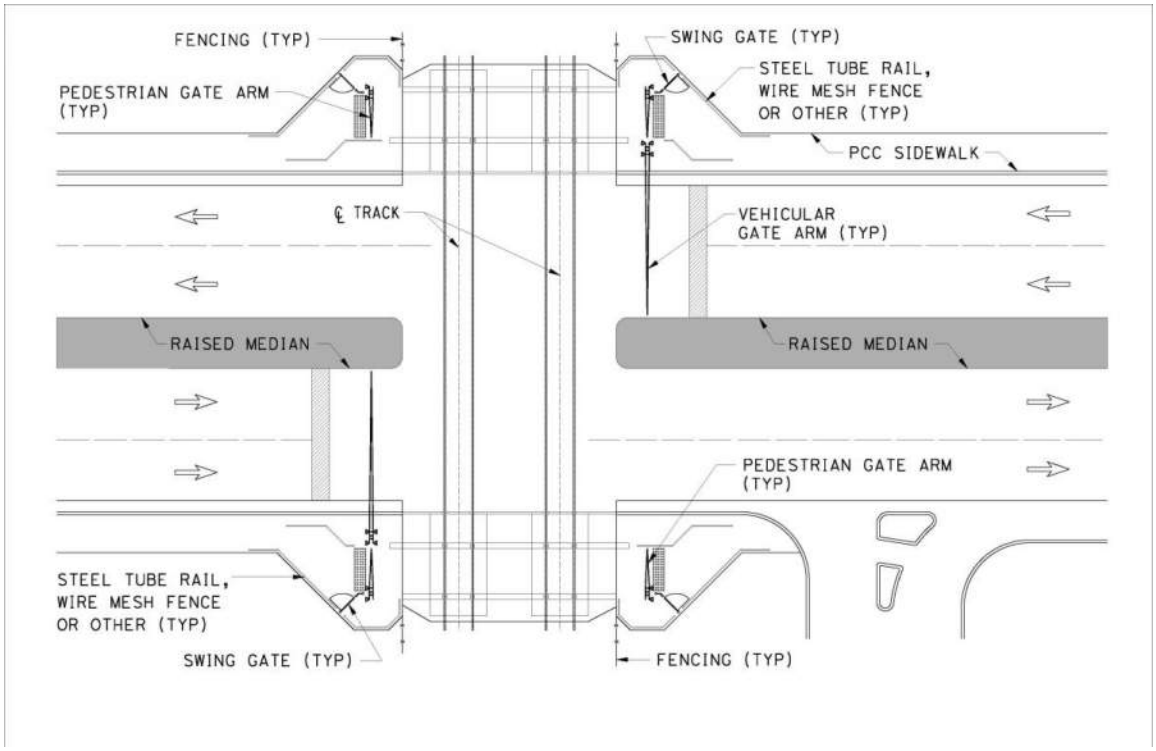

Figure 3-14. Use of a Shaped Median to Control Access

Table 3-3 below shall be consulted for the design of mitigations when driveways are located adjacent to the crossing:

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Table 3-3. Standard Mitigations for Driveways Adjacent to the Crossing

Driveway Location	Medians	Signage	Warning Gates	Traffic Control
Nearside	• Yes	R3-5 (RT) "Right Turn Only" sign	• Installed at entrance quadrant	Consider traffic signals in cases of large driveway volumes
Farside	• Yes • Install island at the driveway to prohibit left turns toward the tracks (see Figure 3-14)	R3-5 (RT) "Right Turn Only" sign	• Installed at entrance quadrant • As a last option, consider exit gates if there is a possibility of unsafe access through the median	Consider traffic signals in cases of large traffic volumes

During the design of the crossing, consider the type of vehicle that will use the driveway and how the driveway will be used. The actions of vehicles and motorists using the highway-rail grade crossing should be observed during the diagnostics and field reviews, and findings incorporated into the design.

Driveways adjacent to a highway-rail grade crossing which require vehicle reversing (backing) movements shall not be allowed and the local highway agency shall prohibit the reversing moves. To clarify, if the driveway can only be accessed by a backing movement by the design vehicle, then this driveway will need to receive one of the following mitigations to eliminate this unsafe and illegal way to access the driveway:

- Relocate the driveway so as to provide sufficient turning capability for the design vehicle.
- Modify the loading/unloading area/location so as to provide sufficient turning capability for the design vehicle.
- Widen the highway so the design vehicle can exit the travelled way, and provide sufficient turning capability for the design vehicle.

In some instances, there may be a nearside driveway that leads to a truck loading dock (See Figure 3-15 for an example of this). In this case, the truck may drive past this nearside driveway, back over the tracks and, while backing up, turn into the nearside driveway to line up to access the loading dock. **The design and actual usage of the driveway shall preclude the movement of vehicles over the tracks while ingressing or egressing the driveway.**

In such instances, the agency shall endeavor to close the nearside driveway or work with the adjacent property owner to control this access or address the unsafe practices. **Special traffic signage shall be installed to control undesirable traffic movements, especially reverse or slow movements into or out of driveways near tracks.**

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Figure 3-15. Loading Dock Adjacent to Right-of-Way

3.8 SIDEWALKS AND PAVEMENT APPROACHES

Sidewalks and pavement approaches to the highway-rail grade crossing shall be constructed using hot mix asphalt concrete between the zero curb line and the panels. Refer to SCRRA Engineering Standards for the location of the zero curb line.

3.9 VISIBILITY

It is SCRRA's policy to work jointly and responsibly with highway agencies, and other adjacent private property owners, to ensure that proper visibility is maintained. Buildings, fences, walls, billboards, highway geometry, trees, vegetation, natural or man-made embankments, or other man-made structures will play a significant role in the overall visibility at the highway-rail grade crossing, and these features will become important in the geometric design process. The vehicle operator should detect the presence of the highway-rail grade crossing, identify and react to the type of traffic control devices at the crossing, and determine whether a train is approaching or occupying the crossing. According to CA MUTCD, all advance warning signing, pavement markings, and highway-rail grade crossing warning devices should be clearly visible to the approaching motorist.

Horizontal and vertical curves within the highway near, or at, the crossing create additional concerns. In cases where the sight distance is not sufficient to allow adequate braking prior to the crossing, the lead Engineer should examine the need for advance warning devices.

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Of particular concern is stopping sight distance near and across the highway-rail grade crossing. Refer to Sections 3.5.7 and 3.5.8 for highway geometry. The lead Engineer shall examine all aspects of the highway geometry and follow the Caltrans Highway Design Manual or AASHTO publication titled "A Policy on Geometric Design of Highways and Streets" for stopping sight distance requirements. The railroad right-of-way often abuts developments consisting of structures which prevent the motorist from clearly seeing down the tracks when approaching the crossing. During the design phase, the lead Engineer shall endeavor to investigate all measures for improving visibility at these crossings, and mitigate any detected hazards.

The following actions should be taken during the design of a grade crossing to preserve visibility:

- Prohibit new trees at highway-rail grade crossing approaches and medians, and ensure existing trees are trimmed for proper visibility.
- Prohibit new ground covers or shrubs exceeding 36 inches in height, and ensure the existing trees are trimmed for proper visibility.
- Investigate the possibility of mitigating the effects of adjacent development on overall visibility at the crossing.
- Ensure stopping sight distances are per the Caltrans Highway Design Manual or the AASHTO publication titled "A Policy on Geometric Design of Highways and Streets".
- **Vehicle parking within 100 feet of the highway-rail grade crossing, as measured from the furthest automatic warning device from the tracks, shall be prohibited.**

Figure 3-16 is an example of how visibility can be impaired at a highway-rail grade crossing by highway geometry and landscaping. Note the following items:

- Advance signs are obscured by trees.

  Mitigations: Avoid the planting of trees adjacent to advance signs.
  Work with the highway agency to adequately maintain trees and landscaping.

- Advance visibility of vehicles downstream of the highway-rail grade crossing is impeded by geometry. The vertical curve at the highway-rail grade crossing may prevent the motorist from seeing possible highway obstructions concealed by the highway profile.

  Mitigations: To the extent possible, design highway geometry to eliminate these cases.
  Install advance warning to warn motorists.

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Figure 3-16. Restricted Visibility at a Highway-Rail Grade Crossing Approach

Regular trimming of vegetation along the approaches to the highway-rail grade crossing is an important responsibility of the highway agency or private property owner.

3.10 SIGHT TRIANGLES

It is SCRRA's policy to work jointly and responsibly with highway agencies, and other adjacent private property owners, to ensure that improvements to properties adjacent to the railroad corridor, and particularly at highway-rail grade crossing, are designed so as to mitigate the effects of the development on highway-rail grade crossing safety.

A sight triangle is the triangular area of visibility required to allow a driver to see an oncoming train (approaching from either direction) in advance of the crossing. The stopping sight distance is measured along the highway and is a function of the distance required for the design vehicle, traveling at the posted speed limit, to stop safely.

The use of the sight triangle for highway-rail grade crossing design is an effective tool for the development of the overall design, as well as to mitigate the effects of restricted visibility. The FHWA handbook shows a calculation used to determine sight triangle distances. Unfortunately, urban areas seldom have the proper site triangle (as shown in the FHWA handbook). In these cases, signal timing, and highway-rail grade crossing warning device timing, must provide adequate warning to enable the motorist to stop prior to the crossing.

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The effects that commercial or residential development can have on the visibility at a highway-rail grade crossing are shown in Figure 3-17. The sight triangles for this highway-rail grade crossing show the effective visibility of the highway-rail grade crossing from the motorist's perspective. This figure demonstrates the effect on overall visibility when buildings are placed adjacent to the right-of-way. The solid green fill shows a constricted sight triangle resulting from the location of proposed buildings on a development site adjacent to the railroad right-of-way.

Figure 3-18 demonstrates the same building configuration relocated to the backside of the property, which results in much improved visibility of the track area. Although this realignment of the buildings does not alter or impair the overall use of the property, it is an effective way of improving visibility and places driveways away from the highway-rail grade crossing.

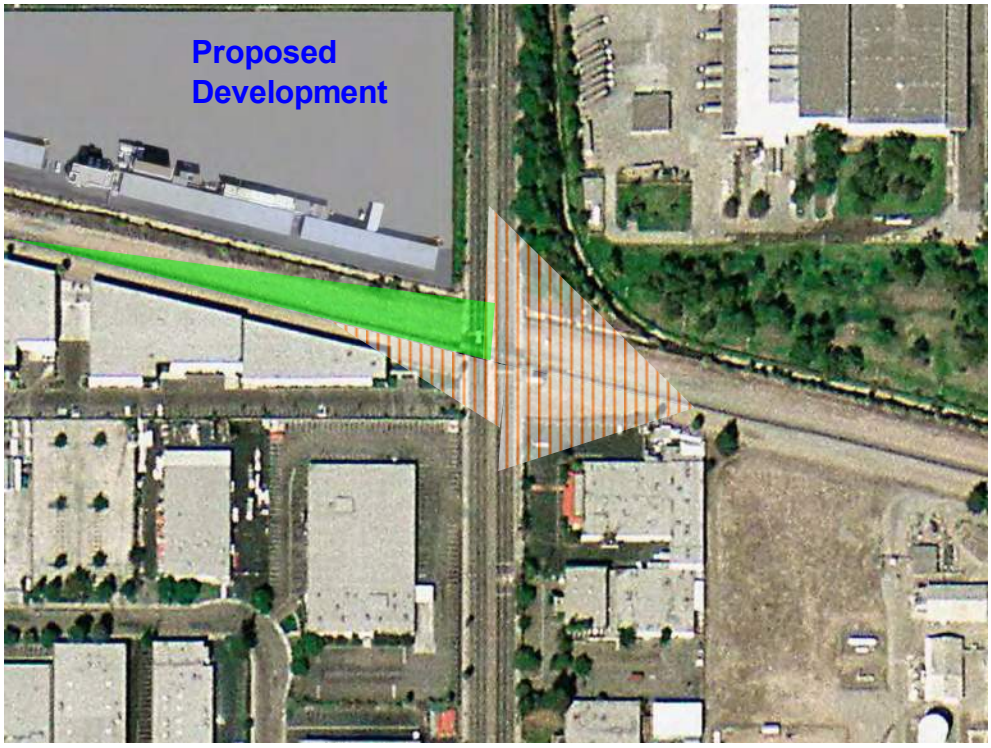

Figure 3-17. Sight Triangle Impeded by Adjacent Buildings

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Figure 3-18. Sight Triangle Enhanced through Alternative Placement of Buildings

3.11 PASSIVE TRAFFIC CONTROL DEVICES

Passive warning devices are traffic control warning devices not activated by trains, vehicles, or pedestrians. Passive warning devices provide static messages of warning, guidance, and (in some instances) mandatory action for the driver. Their purpose is to identify and direct attention to the location of a highway-rail grade crossing in order to permit motorists, bicyclists, and pedestrians to take appropriate action. Passive warning devices consist of regulatory, warning, and guide signs, along with supplemental pavement markings. These basic devices are incorporated into the design of active traffic warning devices. The application of passive devices is defined in Part 8 of the CA MUTCD.

3.11.1 Signage

The application of signage at highway-rail grade crossings is defined in Part 8 of the CA MUTCD. The lead Engineer shall follow the requirements within this section for the proper application of highway signs at the crossing.

In addition to highway signs to be installed at the highway-rail grade crossing, there may be additional signs required, such as, “No Trespassing”. Installation of “No Trespassing” signs on the SCRRA member-owned right-of-way shall be installed per SCRRA Standards.

The highway agency is responsible for approving the use of highway signs, and coordination between highway agency and the lead Engineer is required.

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3.11.2 Pavement Markings

Striping and pavement marking are defined within Part 8 of the CA MUTCD. SCRRA has defined additional striping and delineation requirements that apply to highway-rail grade crossings. These measures include the following:

- Striping along edge of travel way: (SCRRA Engineering Standards 4004)
- Striping between medians: (SCRRA Engineering Standards 4004)
- Possible use of "Keep Clear" pavement markings: (Caltrans)

Maintenance responsibilities for striping and pavement markings are to be defined in the C&M. Also, refer to CPUC GO 75. Generally, the highway agency maintains the highway striping. The lead Engineer is to refer to the configuration and location of striping shown in Chapter 8 of the CA MUTCD. In addition, the lead Engineer is directed to SCRRA Engineering Standards for pavement markings within the limits of the crossing.

The highway agency is responsible for approving the use of highway pavement markings, and coordination between highway agency and the Engineer is required.

3.12 ACTIVE TRAFFIC CONTROL DEVICES

All SCRRA "main track" highway-rail grade crossings should be equipped with active warning devices used to warn vehicles and pedestrians of potential hazards at the crossing, in accordance with the GO 75 of the CPUC, this Manual, and the CA MUTCD. Furthermore, it is SCRRA's policy to require that any new SCRRA "main track" private highway-rail grade crossing shall be so equipped with standard equipment at the private owner's expense. (Refer to Appendix B for the definition of SCRRA "main track").

Each of these types of devices is designed to fill a need at the highway-rail grade crossing to effectively warn of approaching trains. The placement of these devices is an important factor in the development of the highway-rail grade crossing, and must be considered during design. It should be noted that these devices may be installed at locations other than at highway-rail grade crossings to ensure proper advance warning of oncoming trains.

Each warning device is constructed on a substantial foundation required for the safe support of the device. These foundations may take up a broad area and must be considered in the placement of the device. The utilities and drainage associated with the highway-rail grade crossing shall be considered when developing the overall layout of the devices. Additionally, the position of present and future foundations must be taken into account when considering utility encroachment—it may be necessary to relocate utilities and other facilities that could interfere with these foundations.

The placement of active warning devices is an important factor in the overall design process. Baseline criteria have been developed to use for guidance in the placement of the highway-rail grade crossing devices.

Warning gates are physical barriers that obstruct the entrance to the highway-rail grade crossing upon activation by an approaching train. The railroad signaling system activating these devices is further defined within the SCRRA's signal and communication standards. Standard applications of warning gates and flashing signals (Automatic

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Warning Devices) are shown in Figure 3-19 through Figure 3-22. In addition, a cross-buck, and a sign indicating the presence of multiple tracks at the crossing, would be mounted on each gate to indicate the presence of multiple tracks at the crossing.

Flashing signals are mounted on the mast or on an overhead cantilever to provide a visual warning of an oncoming train. These lights are directed toward the approach. In some cases (such as with adjacent driveways and highway), additional auxiliary lights are necessary to provide visual warning for each approach to the crossing.

Some applications of flashing signals include backlights mounted on the mast in addition to the standard flashing signal configuration. *SCRRA's policy is to discourage the use of backlights on exit gates to avoid motorist confusion.* The use of backlights shall be evaluated to determine the necessity of their use and the possibility for motorist confusion.

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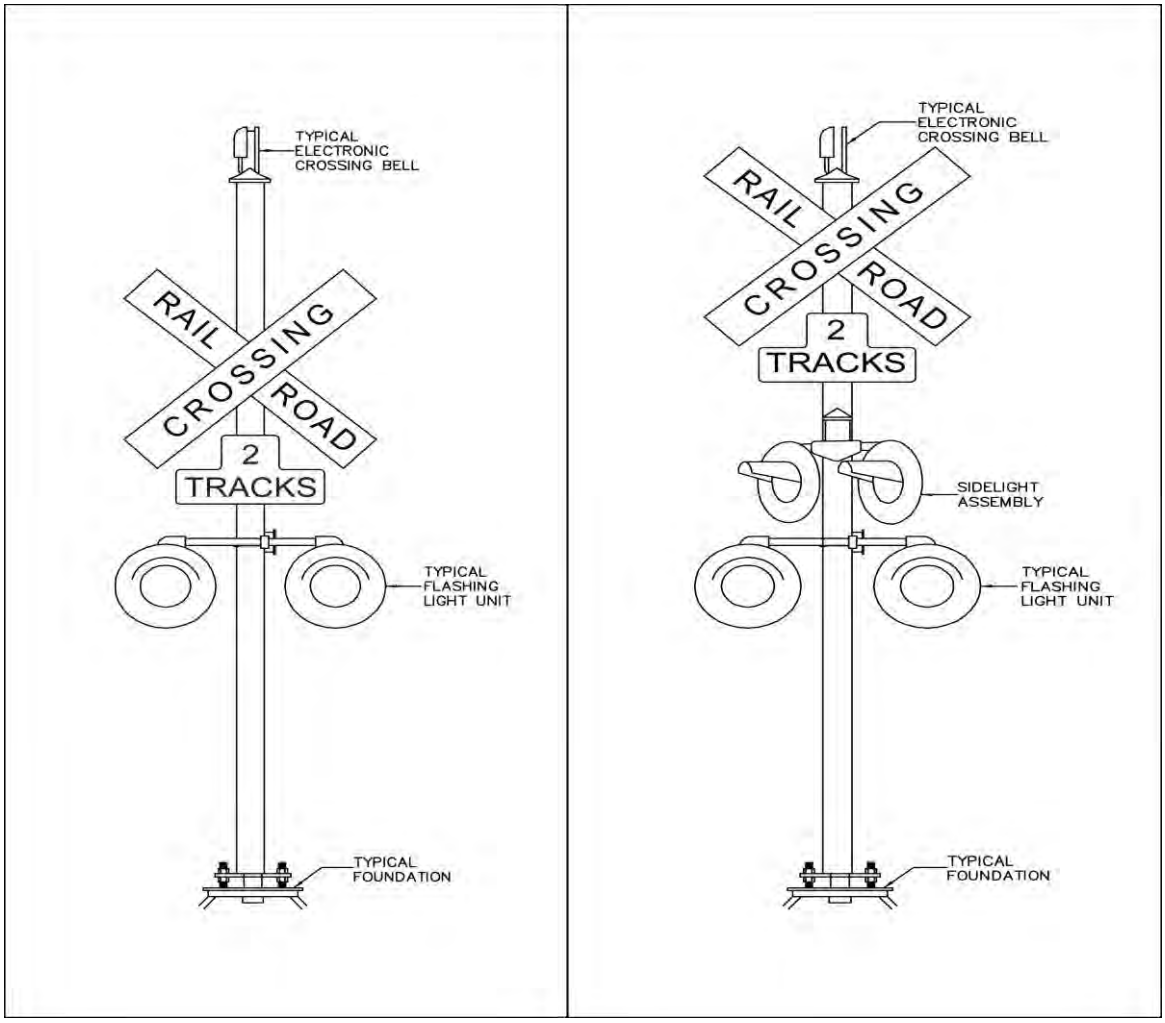

Figure 3-19. Active Warning Device Mechanisms – Standard No. 8 (Left) and Standard No. 8 with Additional Sidelights (Right)

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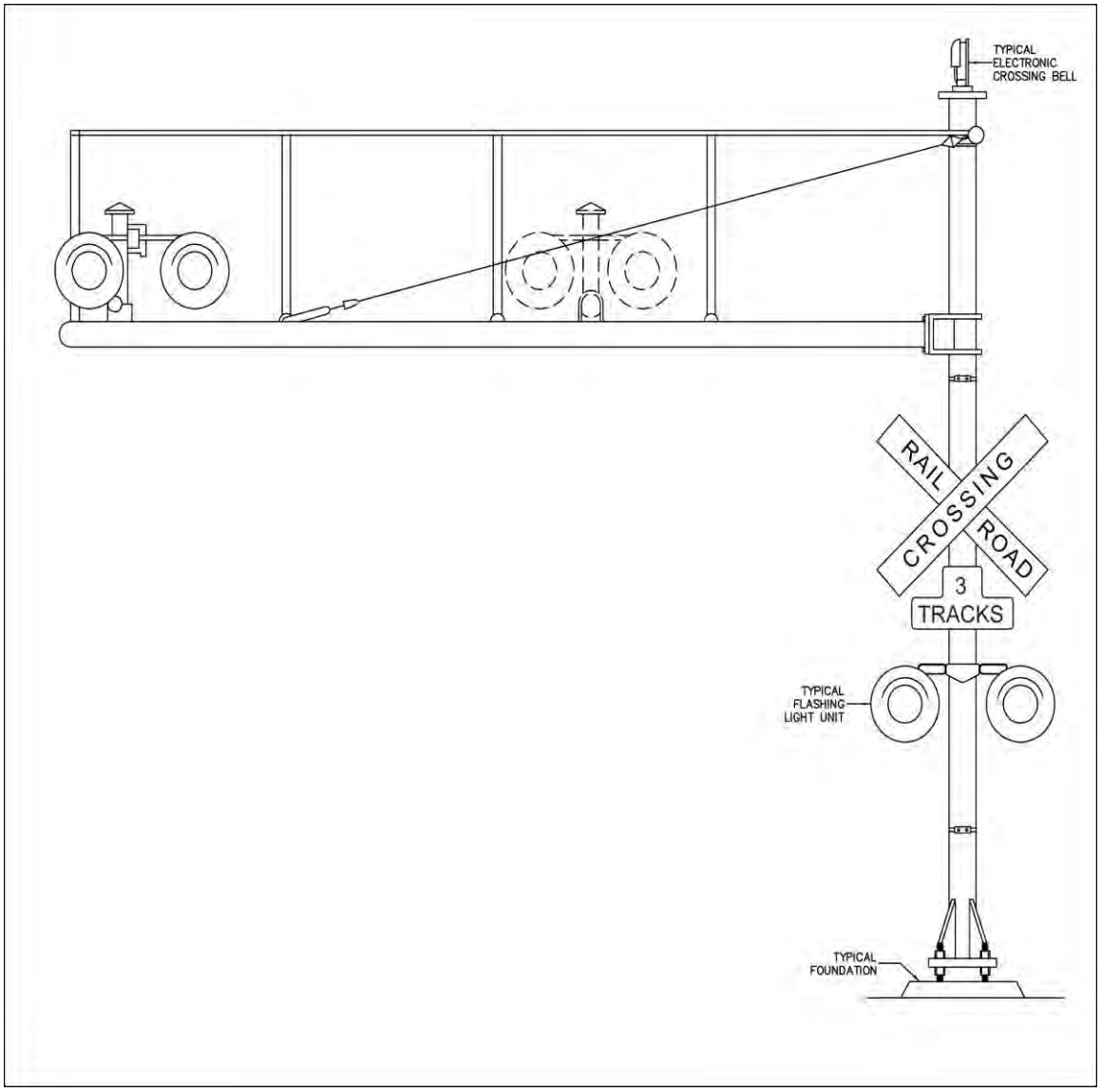

Figure 3-20. Active Warning Device Mechanisms – Standard No. 8-A

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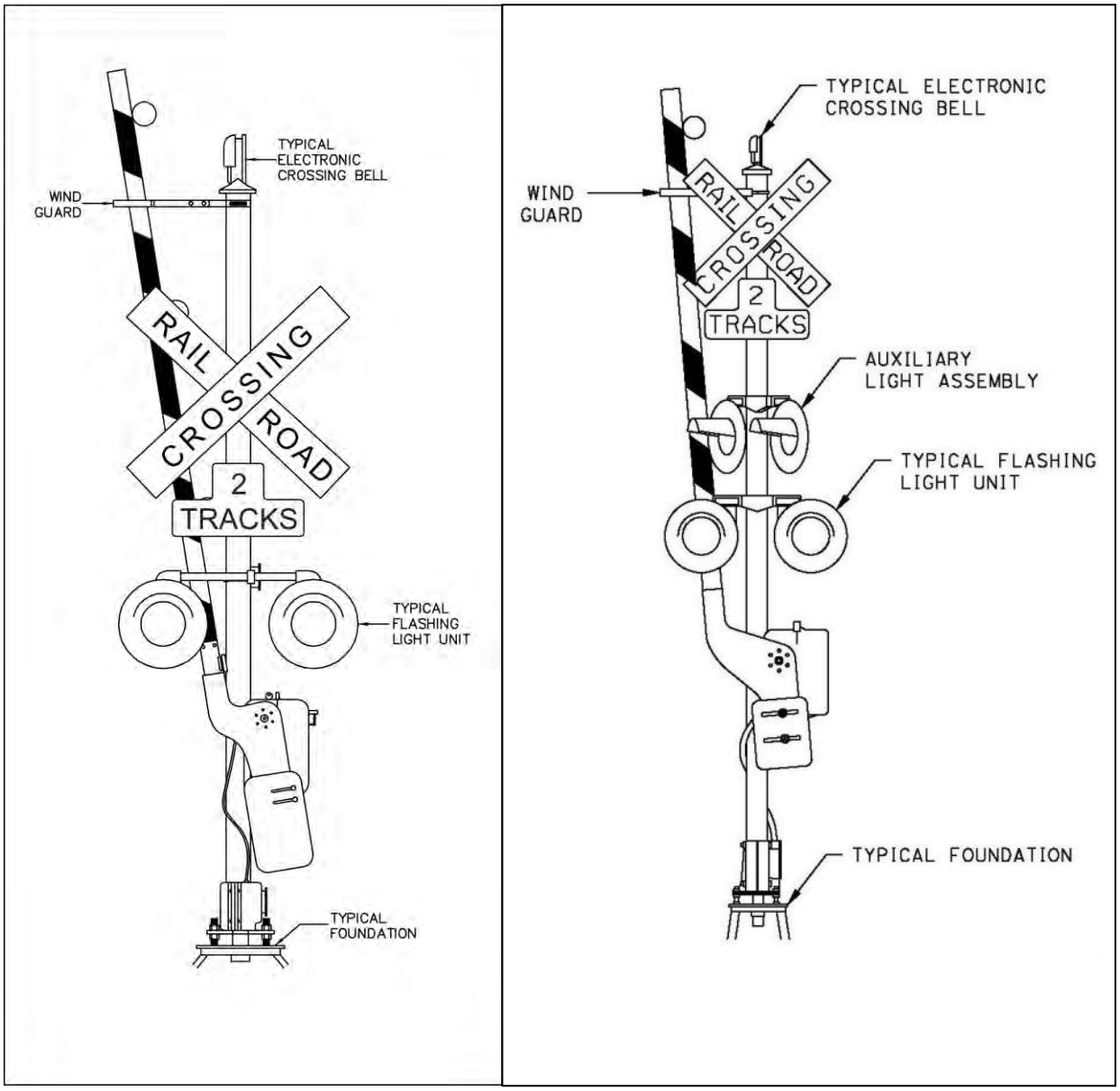

Figure 3-21. Active Warning Device Mechanisms – Standard No. 9 (Left) and Standard No. 9 with Additional Auxiliary Lights (Right)

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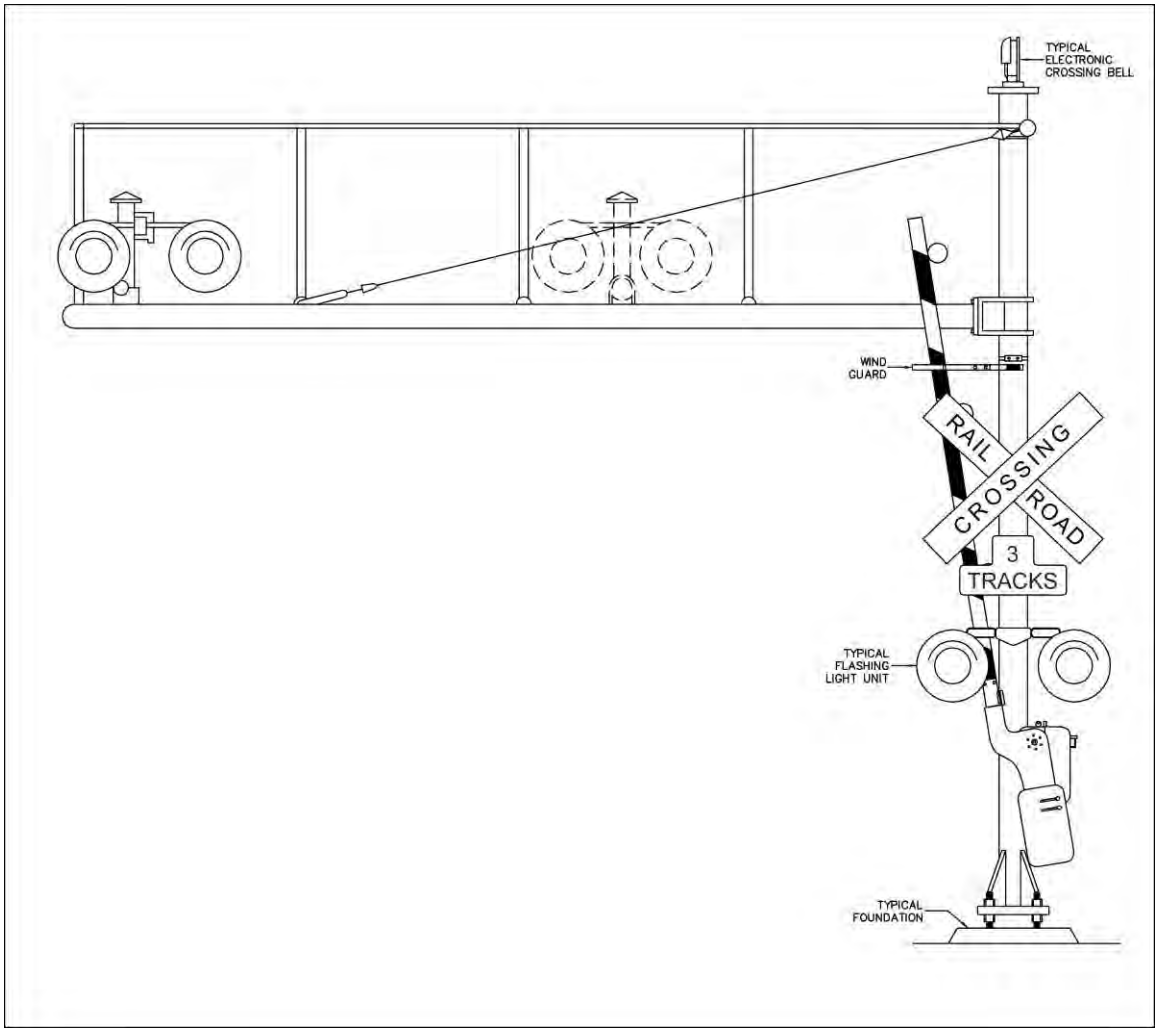

Figure 3-22. Active Warning Device Mechanisms – Standard No. 9-A

For additional information on the various types of warning devices, refer to CPUC General Order No. 75.

As mentioned previously, it is SCRRA standard to provide flashing lights for each traffic lane approaching the highway-rail grade crossing. For more detailed information on the location, dimensions, and selection of warning devices, refer to SCRRA's Engineering Standards for signals and communications.

When the use of a No. 9 Gate (see Figure 3-21) is defined by SCRRA's Engineering Standards, the flashing light mounted on the mast shall provide warning for the curb and the traffic lane. If there is more than one lane, and highway width is greater than the maximum length of the single gate arm, an additional device will be required adjacent to the second lane. A No. 9-A cantilever signal (see Figure 3-22) may be used in order to place the light over the traffic lane.

Where pre-signals are installed, the lead Engineer and the diagnostic team shall evaluate the locations of both the railroad and traffic signaling to ensure the combination

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of traffic lights and highway-rail grade crossing warning lights is coordinated and do not conflict with one another, thus mitigating possible confusion for motorists approaching the tracks.

3.12.1 Two-Quadrant Gate Systems

Standard gate systems utilize gates installed in the entrance, or upstream, quadrant of the highway-rail grade crossing. These gates are intended to prevent the motorist from proceeding into the path of the train when the gate is in the horizontal position. See Figure 3-23 below.

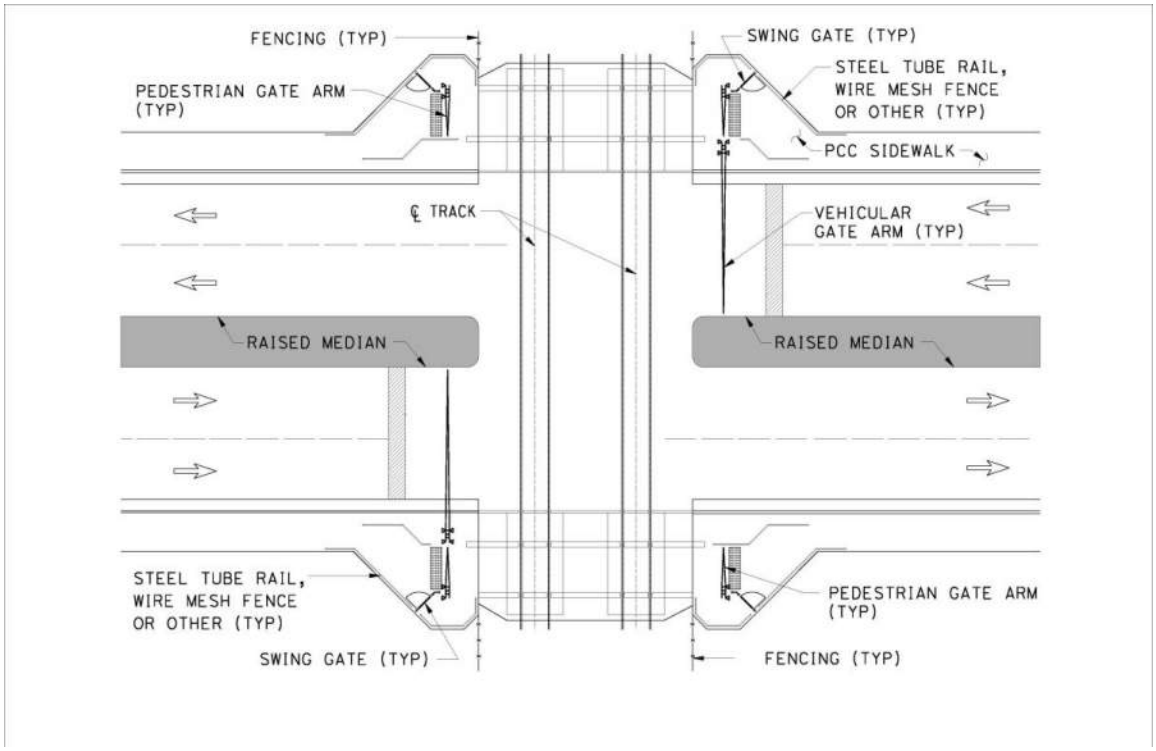

Figure 3-23. Two-Quadrant Gate System

3.12.2 Exit Gate Systems

SCRRA standards call for a raised median (refer to Section 3.6 for additional discussion) instead of an exit gate (with the exception of a highway-rail grade crossing within 100 feet of an intersection with a parallel highway, as discussed below). However, in some applications a raised median may not be possible due to the conditions at the highway-rail grade crossing. In cases such as these, an exit gate may be used as a last resort, but will require a request for a deviation then approval from SCRRA.

Exit gates are seldom used with raised medians of substantial length unless there are extenuating circumstances. Even so, they are discouraged by the SCRRA. This is primarily due to the redundancy in the systems and the long term life-cycle costs of repairing, maintaining, and replacing exit gates as compared to medians. For example, a raised median with exit gates may be utilized where there is an adjacent driveway to the

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crossing. This will prevent an illegal turn out of the driveway and onto the crossing. An example of an exit gate system is shown in Figure 3-24.

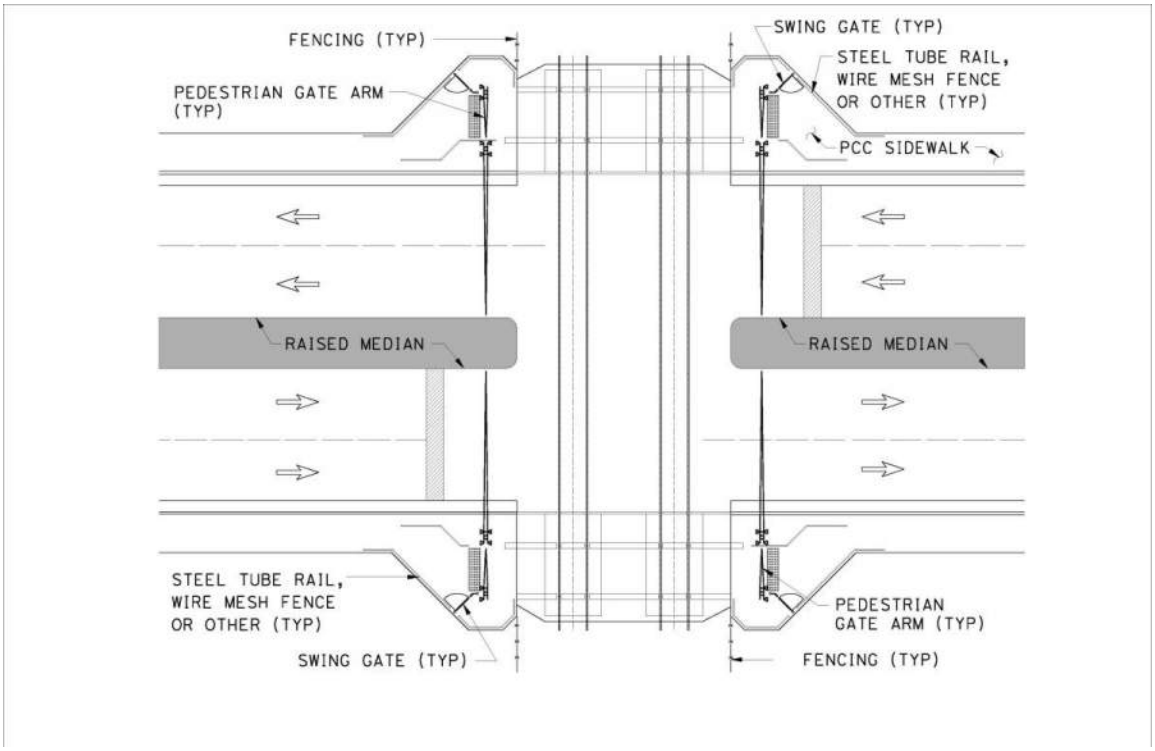

Figure 3-24. Exit Gate Systems

Highways parallel to the tracks present a unique challenge. At an intersection with a highway, access to the track area by traffic turning toward the tracks, particularly a left turn, creates safety situations that should be addressed in design. **For intersections within 100 feet of the highway-rail grade crossing with multiple main tracks, an exit gate shall be installed to prevent left turn movements accessing the track area.** This is shown in Figure 3-25.

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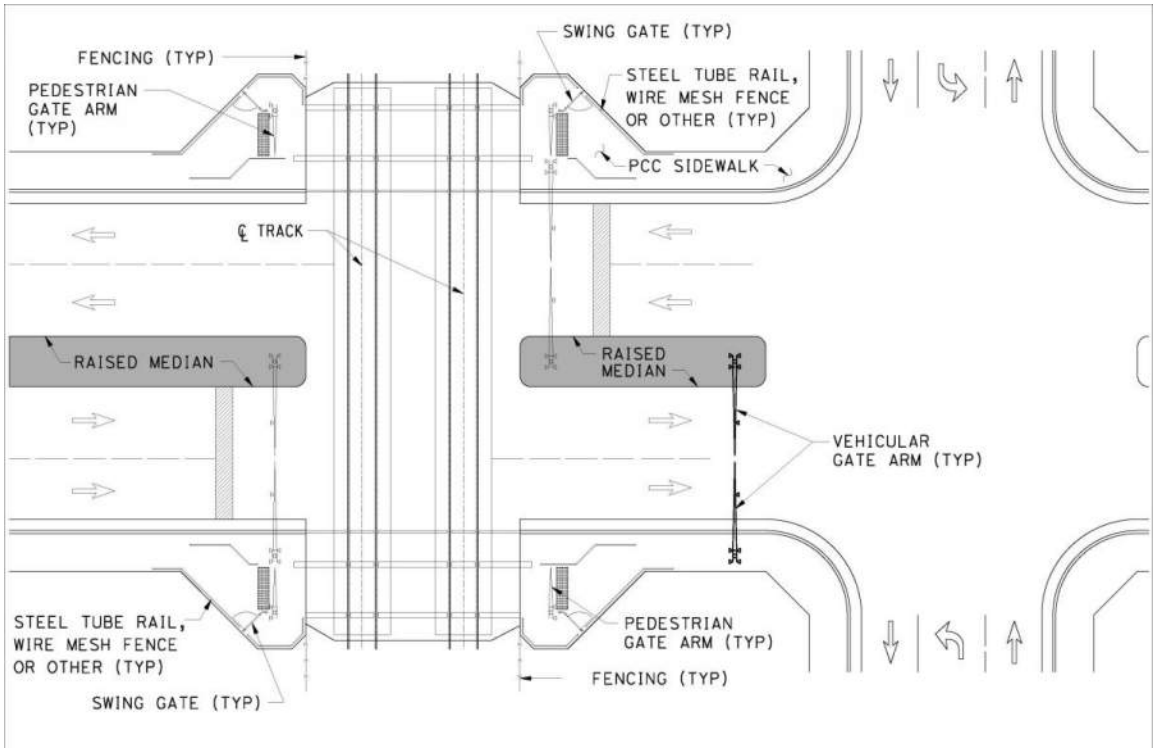

Figure 3-25. Exit Gate Installation near an Intersection

The inclusion of exit gates requires the installation of induction loops that are part of the vital crossing signal system within the pavement. *It is SCRRA's policy to maintain these loops when they are integrated into the vital railroad signal system.* It is important to factor the maintenance of these into the overall C&M Agreement for the highway-rail grade crossing. Refer to SCRRA Engineering Standards for further discussion on the use of induction loops.

The following protocols shall be observed during the engineering and construction of these induction loops:

- The lead Engineer shall refer to SCRRA Engineering Standards for placement of induction loops through the crossing.
- The lead Engineer shall refer to SCRRA Engineering Standards as a minimum standard for the pavement structure through the crossing; shall verify the pavement section through appropriate engineering analysis; and enhance the specifications as necessary to meet the needs of the design. Low maintenance high quality pavement sections shall be installed within 50 feet of the highway-rail grade crossing.
- The lead Engineer shall include within the construction specifications a mandate that the contractor shall not install pavement within the limits of the highway-rail grade crossing and the induction loops without the review and approval of the SCRRA.
- The highway agency having jurisdiction over the highway shall execute a C&M Agreement defining the induction loops, as well as the division allocation of maintenance responsibilities and costs regarding the crossing.

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Table 3-4 below can be a used as a reference for the installation of gates.

Table 3-4. SCRRA Standard for Gate Installations

Number of Approach Lanes	Raised Median	Option 1	Option 2	Option 3
1	No	Two No. 9 devices	N/A	N/A
1	Yes	Two No. 9 devices	N/A	N/A
2	No	Two No. 9-A devices	N/A	N/A
2	Yes	Two No. 9-A devices	Four No. 9 devices	Two No. 9 devices with a cantilever
3	Yes	Two No. 9-A devices Two No. 9 devices	N/A	N/A
4	Yes	Four No. 9-A devices	N/A	N/A

3.12.3 Measures to Counter Potential Gate Violations

When analyzing a highway-rail grade crossing for gate placement, it is important to assess the opportunities that motorists will have to drive around the lowered gate. Many conditions exist that promote such opportunities. Three of these are listed below:

- Higher traffic counts, and the resulting delays at the gates.
- In locations, or at times when there is light traffic, presenting less restrictions to gate violation.
- In locations where the vehicle crossing is adjacent to a station where dwell times within the station cause longer gate down time.
- The proximity of driveways or intersections that provide opportunities for gate violations.

The lead Engineer, along with diagnostic team, shall analyze the project location to assess the need to install median islands, lengthen existing median island(s), or to include exit gate(s) in order to counter potential or observed gate violations.

3.13 ADJACENT CROSSWALKS

Pedestrian crosswalks parallel and adjacent to highway-rail grade crossings are strongly discouraged. Pedestrians using these crosswalks may cause vehicles to queue over the highway-rail grade crossing without an avenue of escape. Active measures should be taken to prohibit access using signage and barricades. A request

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for a deviation from the recommended design practices and standards must be submitted

Figure 3-26 below is an example of how the presence of pedestrians can inhibit vehicular traffic from clearing the track area.

Figure 3-26. Pedestrian Crosswalk Parallel and Adjacent to a Highway-Rail Grade Crossing

3.14 ADJACENT HIGHWAY-RAIL GRADE CROSSINGS

The location of adjacent highway-rail grade crossings should generally be noted and analyzed with the operation of the subject highway-rail grade crossing. Separate railroad operations on the adjacent highway-rail grade crossing may cause vehicles waiting behind lowered gates to queue back over the adjacent highway-rail grade crossing. In these situations, the location and proximity of the operations will have a large impact on the overall design.

At locations where there is a possibility of vehicles queuing over a highway-rail grade crossing, the lead Engineer shall coordinate the design with the owners and operators of both highway-rail grade crossings to develop a solution to avoid vehicles being trapped

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between the highway-rail grade crossings or over the adjacent highway-rail grade crossing.

3.15 TRAFFIC SIGNALS

The placement of traffic signals depends upon the proximity of the highway intersection to the highway-rail grade crossing, alley intersections, driveway intersections, vehicle queuing, and the impact of adjacent traffic control devices on the operation of the highway-rail grade crossing. The lead Engineer shall consider several factors when deciding on the inclusion of a traffic signal into highway-rail grade crossing system, some of which are listed below. In addition, the lead Engineer should conduct queuing studies during traffic peak-hours to accurately assess actual traffic conditions at the project site.

- Traffic congestion should be minimized along the highway that crosses the railroad tracks. Various factors affect the operation of traffic at the highway-rail grade crossing and tend to cause traffic to queue over the tracks.
- The presence of a traffic signal downstream, or upstream, of the highway-rail grade crossing may tend to generate long traffic queues that could back up over the tracks.
- CA MUTCD Part 8 Section 8D.07 recommends the preemption of traffic signals located within 200 feet of the highway-rail grade crossing. In addition, Section 8D.07 suggests preemption may be appropriate for longer distances, depending upon vehicle queuing. Refer to Section 3-16 of this Manual for additional information on preemption.
- The location of a nearby stop-controlled intersection may tend to cause traffic to back up into the highway-rail grade crossing, especially during peak traffic hours.

Some commonly used mitigation measures are as follows:

- Traffic signal coordination, including the installation of queue-cutter signals, pre-signals, and/or turning movement prohibitions.
- Replace the stop control with a preempted traffic signal.

3.15.1 Adjacent Stop Controlled Intersections

Adjacent stop controlled intersections should generally be avoided in all instances. Vehicles traversing the highway-rail grade crossing should have a clear path over the crossing that is unimpeded by vehicular cross traffic. The existence of a stop sign controlling vehicular movements over the crossing may force vehicles to wait for cross traffic to clear before proceeding. In cases where there is limited distance between the highway-rail grade crossing and the adjacent intersection, or significant vehicular traffic over the highway-rail grade crossing, vehicles can queue over the highway-rail grade crossing without a means of escape.

3.15.2 Design Scope

This section establishes the basic traffic engineering criteria to be used in the design of traffic signal systems affected by SCRRA's operations.

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The design shall specify all traffic signal equipment, including: traffic signal controller assemblies, the railroad interconnection system, lighting systems, sign illumination systems, communication systems electrical equipment, and provisions for future systems, and any combinations thereof. *The design shall incorporate equipment that has been proven to be reliable, durable, and effective on the SCRRA or other major Class 1 inter-city passenger or commuter railroad systems, and already is or can be readily incorporated in current SCRRA System active warning devices.* In order to provide this, the lead Engineer shall coordinate with SCRRA forces for advice/direction regarding this matter.

The design shall incorporate features and equipment that are familiar to the SCRRA Engineering, Construction and Maintenance staff and contractors and that will contribute to the inspection, testing, repair operations, and maintenance of the traffic signal system. Any new testing procedures, or methods required by new equipment, must be identified and submitted to SCRRA and the highway agency for consideration and approval before implementing the new equipment and procedures.

All designs shall be submitted for SCRRA approval in accordance with Section 7.9 "Submittals" of this Manual. The local highway agency shall also approve the design of the traffic signal system.

3.15.3 Traffic Signal Standards

Traffic signal systems shall be designed in accordance with the standards and practices of the stakeholder having jurisdiction over the specific traffic signal system. The most current version of the applicable standards in effect at the time of proposal submission shall be used.

The design shall adhere to the latest version of CA MUTCD and the local jurisdiction's design criteria for traffic signals, or to a separate criterion specifically established by the local jurisdiction. Any new or modified traffic signal system shall be coordinated and integrated into the civil and track design to provide a seamless interface between the design disciplines.

3.15.4 Traffic Signal Design

As per the CA MUTCD, if preemption is provided at a signalized intersection, the normal sequence of traffic control signal operation shall be interrupted by the railroad (preempted upon the approach of a train). The sequence of traffic signal and railroad warning system operations during the interruption shall avoid entrapment of vehicles on the highway-rail grade crossing (entrapments that might result from conflicting displays in which the traffic control signals are green, even while the railroad active warning flashing-light signals are active). **During the preemption hold interval, the traffic signal indications shall prevent vehicles from moving toward the track area.** All turning movements toward the highway-rail grade crossing that are currently permitted shall be prohibited during the signal preemption sequences. **A blank-out, changeable message sign, appropriate highway signal indication, or other similar control shall be used to prohibit turning movements toward the highway-rail grade crossing during preemption**. The R3-1 and R3-2 blank-out signs that are to be used as appropriate for turn prohibition are shown in Figures 3-27 and Figure 3-28. Turn prohibition blank-out signs that are associated with preemption shall be visible only when

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the highway-rail grade crossing restriction is in effect. For signalized intersections that display a red indication, during preemption, to restrict all movements across the tracks, an R10-11 blank-out sign may be used.

The R3-1, R3-2, and R5-1 blank-out signs are typically placed where they may most easily be seen by the motorist intending to make a turn. The R3-1 should be placed over the highway in line with the right-turn lane, or at the right corner of the intersection. The R3-2 should be placed over the highway in line with the left-turn lane adjacent to the left-turn signal indication, or on the median (in line with the left-turn lane). The R5-1 should be placed appropriately for the movement being restricted.

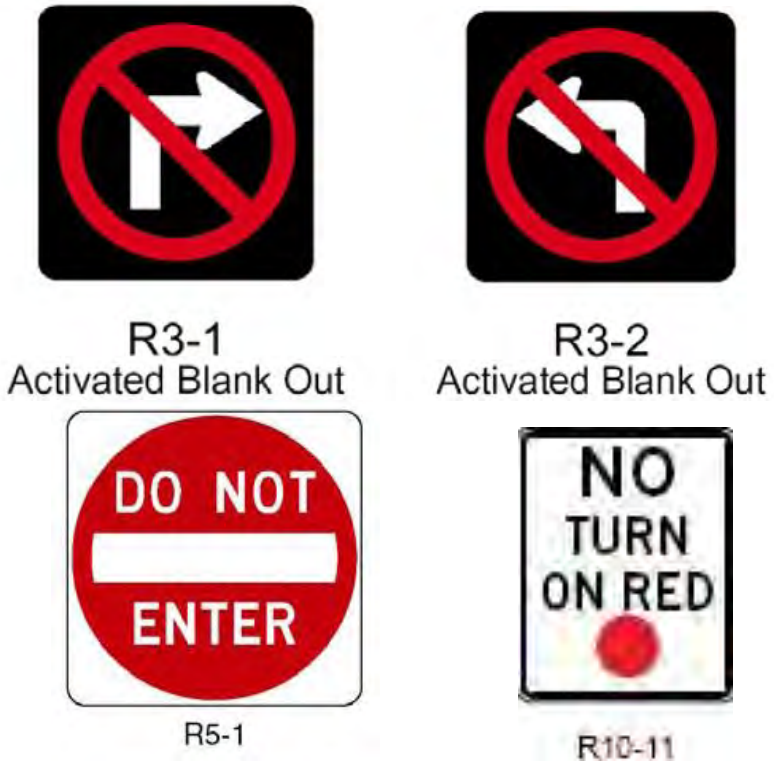

Figure 3-27. Turning Movement Blank-Out and Associated Signs

Figure 3-28. Turning Movement Blank-Out Sign

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As per the CA MUTCD, whenever a traffic signal is provided with emergency vehicle preemption and railroad preemption, the railroad preemption shall have priority. In the event of a demand for emergency vehicle preemption during the time the intersection is operating on railroad preemption, the railroad preemption sequence shall continue unaffected until completion. In the event of a demand for railroad preemption during emergency vehicle preemption operation, the railroad preemption function shall immediately assume control of intersection operations. However, traffic signals may be used to enhance the control of highway users at highway-rail grade crossings.

A detailed analysis shall be conducted for any planned signalized intersection to properly define the lane geometry and configuration. The objective is to efficiently control the signalized intersection and maintain a reliable railroad operating system.

Traffic signal system design shall incorporate input from the stakeholders having jurisdiction over the signal system. A traffic signal system plan shall be prepared for each new or revised traffic signal system. The traffic signal system plan shall be in a format acceptable to the stakeholder having jurisdiction over the signal system, and shall be prepared by a professional traffic Engineer registered in the State of California.

The following general criteria shall apply:

- Traffic signals, pedestrian signals, and any special signs and signals required shall be designed and installed in accordance with the local jurisdiction's specifications.
- Where there are existing conductors, interconnecting traffic signals, and railroad signals, they may be used if in good condition and adequate for the desired type of interconnection. See Section 6.10 for information on interconnection circuitry. New traffic signals shall be integrated into the existing or modified system, as appropriate, in accordance with the local jurisdiction's standards and specifications, and SCRRA requirements.
- The traffic signal lead Engineer shall be responsible for coordinating with the appropriate local utility company to determine the source of power and the utility company's requirements for each new or revised traffic signal and safety lighting system.
- The design and placement of vehicle induction loops near the tracks shall be coordinated with SCRRA railroad signal engineers.
- *Where the traffic signal system design requires the removal of existing traffic signal equipment, the existing traffic signal system shall be kept operable until the new equipment has been installed, tested, and ready for activation.* During periods when the existing traffic signal is inoperable, the intersection shall be flagged in accordance with the requirements of the local jurisdiction. In cases where this occurs within 200 feet of a highway-rail grade crossing, SCRRA shall control the highway-rail grade crossing with flagging.

3.15.5 Left-Turning Movements

A traffic study shall be conducted to determine the need and length for left-turn pockets and protected left movements at existing signalized intersections that are preempted by trains which, under the original conditions, do not have left-turn pockets or protected left-turn signal indications (green arrows). All legs of the intersection should be evaluated to

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determine the appropriateness of the left turn protection. In addition, the length of the left-turn lane should be evaluated for proper application according to traffic demands. The left-turn protection (green arrow) shall provide the following criterion during the preemption sequence:

- Provide sufficient green time for the left-turning motorists traveling away from the highway-rail grade crossing to clear any vehicles from the railroad tracks.
- Restrict conflicting left-turn movements toward the tracks.
- Allow non-conflicting left-turn movements away from the tracks during the preemption hold interval.
- **In case there is an existing left-turn lane and it is not provided with a signal head equipped with protected left-turn arrow, the traffic signal shall be modified to provide protected left-turn arrow, or a blank-out sign.**

The lead Engineer shall analyze the length of left-turn lanes in association with the overall crossing. **A left-turn lane pocket configuration extending across the tracks is not allowed** unless countermeasures such as traffic signals, striping, and signing are also used to warn motorists not to stop on the tracks. A deviation from the Manual must be requested for this configuration. Several concerns arise with this configuration:

- Vehicles waiting to turn are impeded from turning by cross-traffic, since the turn onto the cross street is not controlled by a traffic signal
- Vehicles queuing in this left-turn lane over the track will not have an unimpeded egress should a train arrive.

In such cases, the design shall provide appropriate mitigations to avoid the trapping of vehicles across the highway-rail grade crossing.

- Install a preempted traffic signal at the cross street to allow the clearance of the left-turn lane on the arrival of a train
- Install a queue-cutter signal or pre-signal to control vehicles stopping on the tracks.

It must be noted that the addition of a left-turn lane, as well as changing the length of the left-turn lane, should only be considered after a proper engineering study regarding the traffic movements associated with that lane are known. The left-turn lane shall be of sufficient length to avoid vehicles waiting for the left turn to impede approaching traffic.

3.15.6 Pre-Signals

Refer to Part 8 of the CA MUTCD for requirements associated with pre-signals. Whereas existing traffic signal preemption is mandated to clear queued vehicles from the crossings upon arrival of trains, a pre-signal is intended to preclude, or minimize, and queuing across the highway-rail grade crossings during each traffic signal cycle, regardless of the presence of a train on the approach. A pre-signal does not eliminate the need for preemption, but it does significantly reduce the likelihood that vehicles are within the minimum track clearance distance, and clear storage distance, at the onset of the clear track green interval (see Section 3.15 for an explanation of these terms). See Figure 3-29 for a typical pre-signal.

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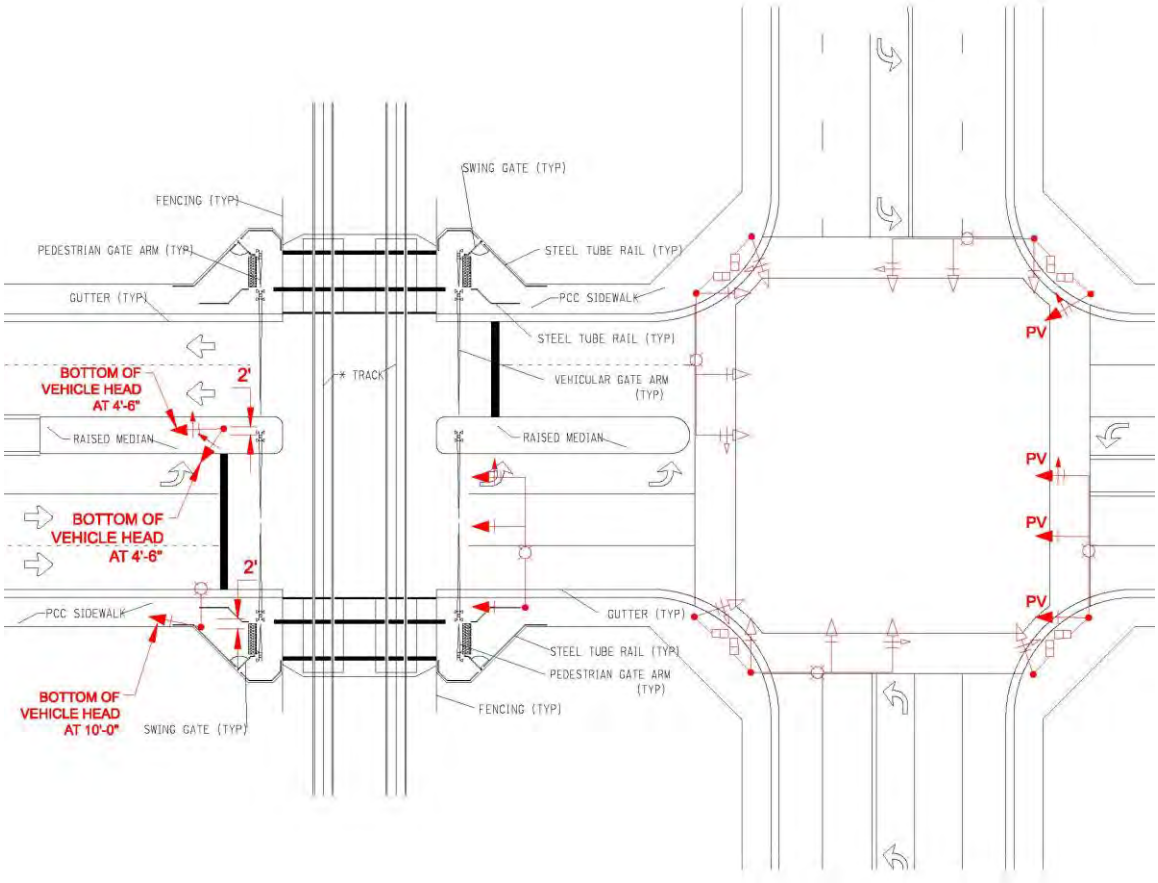

Figure 3-29. Typical Pre-Signal Layout

The lead Engineer should be aware that the installation of pre-signals, in coordination with railroad warning signals, can create instances where the motorist may become confused by conflicting signal directions. This can be a particular problem when the traffic signals on an overhead mast flash red as the railroad signal lights on a cantilever flash red. These send conflicting messages to the motorist: a flashing red traffic light indicates stop and proceed, while a flashing railroad warning light indicates stop. **The use of a Standard No. 9-A cantilever for a pre-signal is not allowed.** In locations where both a pre-signal and a cantilever are already present or are typically required, the lead Engineer should consider installation of the pre-signal and omit the installation of the Standard No 9-A device. This installation allows the railroad warning gates and lights to operate in conjunction with the traffic pre-signals to send the appropriate message to the motorist.

If the pre-signals are on separate masts, they must be positioned so as to avoid interference to the visibility of the railroad flashing-light signals or other traffic control signals.

A pre-signal should be considered in the following cases:

- Where the clear storage distance [measured between six (6) feet from the rail nearest the intersection to the intersection stop line, or the normal stopping point on the highway] is 50 feet or less.

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- At approaches where high percentages of multi-unit vehicles are evident, the distance should be 75 feet. A vehicle classification study should be conducted to determine the types of vehicles using the crossing.
- Where the clear storage distance is greater than 50 feet or 75 feet (depending on the highway vehicle design length), but less than 120 feet, and an engineering study determines that the queue extends into the track area.

An engineering study should be made to evaluate the various elements involved in a pre-signal, addressing the following as a minimum:

- Site conditions of the highway-rail grade crossing and intersection, including minimum track clearance distance and clear storage distance.
- Traffic patterns, including queuing at the crossing.
- Type of vehicles that use the highway-rail grade crossing (to determine timing parameters).
- Highway-rail grade crossing and road intersection geometry, including grades, horizontal and vertical curves, and obstructions as well as the lateral and vertical angles of sight toward a signal face, to determine the vertical, longitudinal, and lateral position of the signal face.

Pre-signals can be used for stopping vehicular traffic before the highway-rail grade crossing where the clear storage distance is 200 feet or less. Pre-signals shall be considered when the clear storage distance is less than 120 feet. An engineering study shall confirm the correct application of pre-signals.

3.15.7 Pre-Signal Location

There are two primary alternative locations for placement of traffic signal heads at the crossing. Pre-signals on poles can be placed on the near side of the highway-rail grade crossing and on mast-arm poles placed ahead of the highway-rail grade crossing (upstream), or between the highway-rail grade crossing and the intersection (downstream). *Downstream placement is the preferred position, so the stopping position of the vehicular traffic is close to the crossing.* Where the pre-signal pole is mounted in advance of the highway-rail grade crossing with multiple approach lanes, a unit shall be placed on the sidewalk and on an inside median. **In all cases, pre-signal poles shall be positioned so as to maintain visibility of the railroad flashing lights.**

As per CA MUTCD (Section 4D-15 standard), a minimum of two signal faces shall be provided for the major movement on the approach to an intersection. At least one and preferably both of the signal faces shall be located as follows:

- Not less than 40 feet beyond the stop line, unless a supplemental nearside signal face is provided.
- Not more than 150 feet beyond the stop line, unless a supplemental nearside signal face is provided.
- As near as practical to the line of the driver's normal view, if mounted over the highway.

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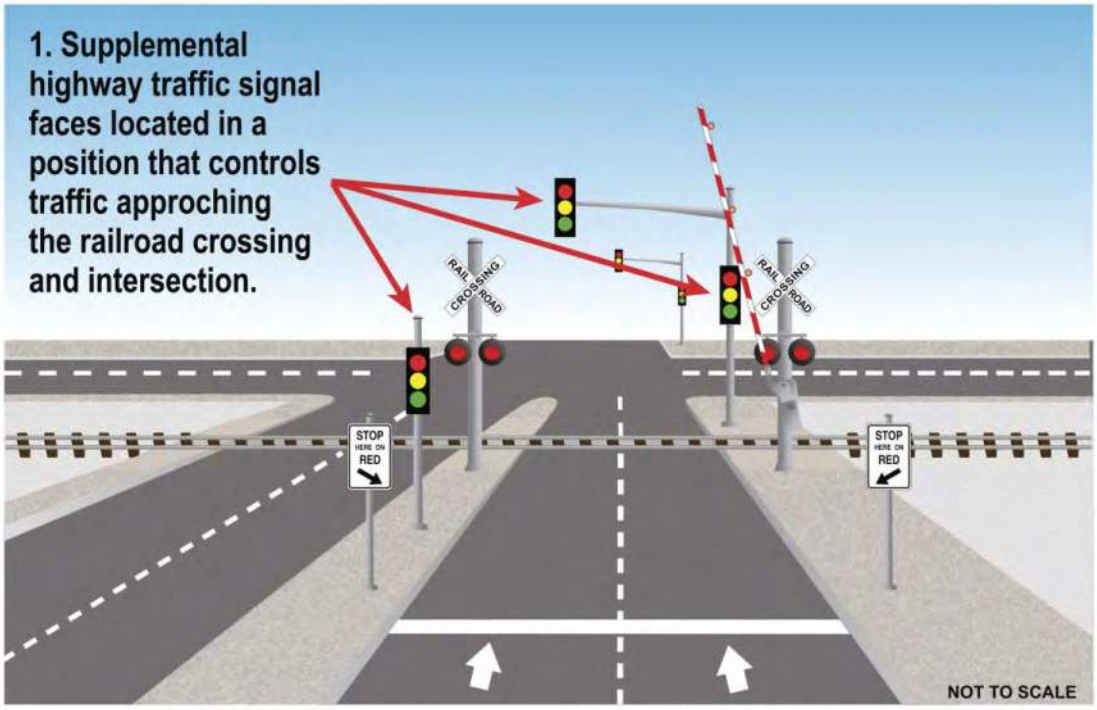

Figure 3-30. Pre-Signal Placement

3.15.8 Downstream Pre-Signals

Figure 3-30 shows a typical downstream installation, which includes a supplemental nearside signal face in the median. As specified in CA MUTCD, the stop line should be placed no closer than 15 feet from the nearest rail, and eight (8) feet from the railroad gates (if present). It is desirable to utilize this same stop line for the pre-signal indications, if possible. Placement of the traffic signal stop line at the same location as the railroad warning gate stop line has two advantages:

- Transit vehicles and trucks required to stop at crossings would not be subject to a double stop
- Heavy vehicles will be closer to the crossing, and therefore more able to clear the minimum track clearance distance during preemption

If clear storage distance is 50 feet or less, and if it is possible to use the nearside intersection signal heads as a pre-signal, the stop line of the pre-signal should be at the same location as the railroad warning gate stop line. **The farside intersection signal heads shall be equipped with programmed-visibility heads or louvers to restrict visibility of the intersection signal displays to drivers at the pre-signal stop line**.

If the clear storage distance is more than 50 feet, and if it is possible to locate a pre-signal between the highway-rail grade crossing and the intersection, the pre-signal faces should be located such that the stop line of the pre-signal is at the same location as the railroad warning gate stop line.

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3.15.9 Upstream Pre-Signals

In order to meet CA MUTCD requirements, when traffic signal faces are located near the railroad warning devices, the stop line must be located a minimum of 40 feet ahead of (upstream) the signal faces. If the stop line distance is shortened, a low mount pre-signal head and a “STOP HERE ON RED” (R10-6) sign shall be installed to warn approaching traffic of the traffic control signal. The intersection signal heads should be equipped with programmed-visibility heads or louvers to restrict visibility of the intersection signal displays to the drivers at the pre-signal stop line.

3.15.10 Pre-Signal Operations

The pre-signal intervals should be progressively timed with the downstream intersection signal intervals, providing adequate time for vehicles to clear the minimum track clearance distance and continue through the clear storage distance area and downstream intersection. Vehicles that are required to make mandatory stops (such as school buses and vehicles hauling hazardous materials) should be considered when determining the preemption timing design parameters.

Unless otherwise defined, the design vehicle shall be for purpose of the Manual the AASHTO WB-65 semi-tractor-trailer.

Where the clear storage distance is inadequate to store the design vehicle clear of the minimum track clearance distance, consideration should be given to the installation of vehicle detection loops within the clear storage distance. This could prevent vehicles from being trapped within the minimum track clearance distance by extending the clear track green interval.

Pre-signals shall display a red signal indication during the transition into the preemption control portion of a signal preemption sequence. This shall prohibit additional vehicles from highway-rail grade crossing the railroad tracks.

3.15.11 Signs and Markings for Pre-Signals

Figure 3-31 shows typical placement of signs and markings for a pre-signal. If a pre-signal is installed at an interconnected highway-rail grade crossing near a signalized intersection, an R10-6 (“STOP HERE ON RED”) sign shall be installed at the stop line. If there is a nearby, signalized intersection with insufficient clear storage distance for a design vehicle, or if the highway-rail grade crossing does not have gates, an R10-11 (“NO TURN ON RED”) sign shall be installed for the approach that crosses the railroad track.

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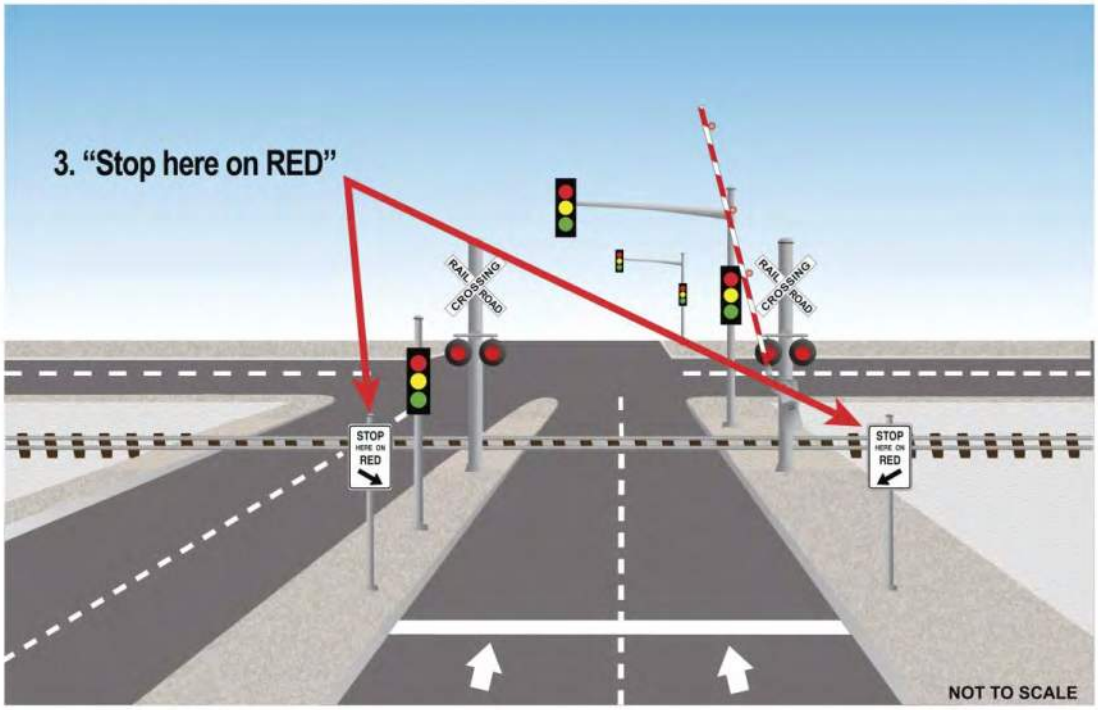

Figure 3-31. Pre-Signal Signs and Markings

3.15.12 Queue-Cutter Signals

Another solution to traffic queuing onto the tracks, and an alternative to a pre-signal, is the use of an automated queue-cutter traffic signal upstream of the highway-rail grade crossing. A queue-cutter signal differs from a pre-signal in that if the clear storage distance is greater than 200 feet; any traffic signal heads located at a highway-rail grade crossing should be considered to be a separate, mid-block highway-rail grade crossing(a "queue-cutter" signal), and not a pre-signal. The queue-cutter signal can be utilized in conjunction with R8-8 signs ("DO NOT STOP ON TRACKS"), as per CA MUTCD requirements. The queue-cutter traffic signal can be activated by vehicle detection (typically induction loops) on the departure side of the highway-rail grade crossing to detect a growing queue between the highway-rail grade crossing and the downstream highway intersection. Figure 3-32 indicates the use of a queue-cutter signal.

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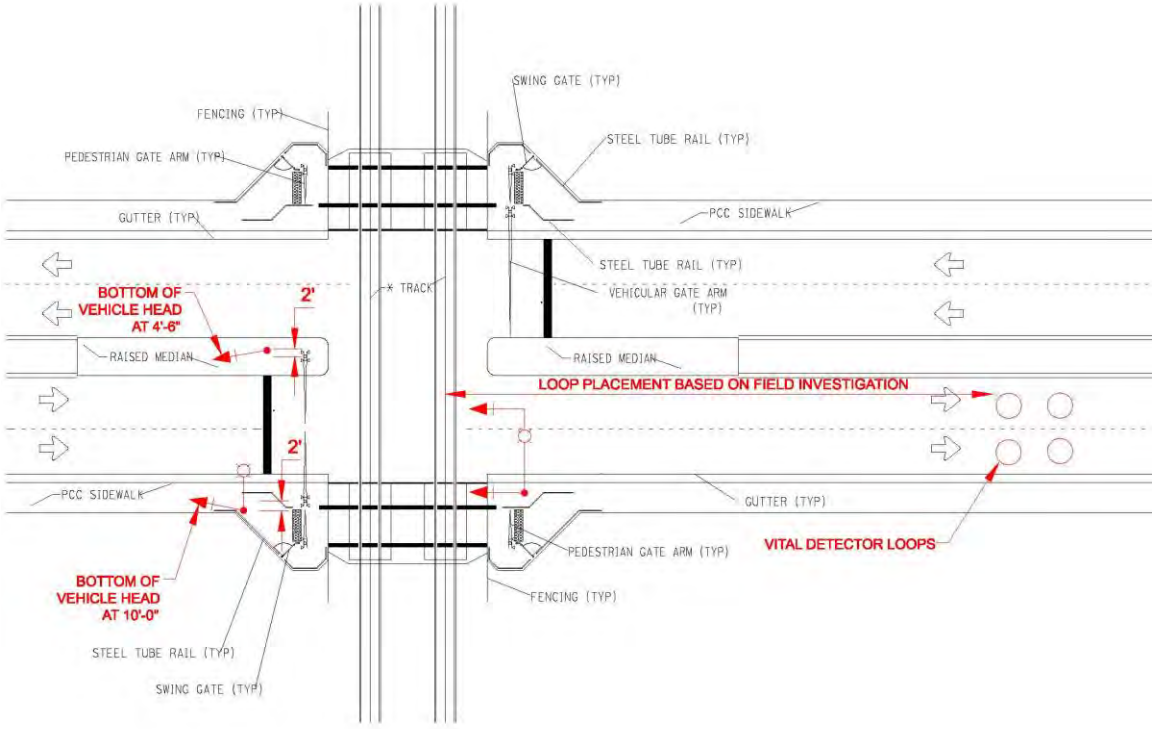

Figure 3-32. Queue-Cutter Signal Placement Layout

3.15.13 Traffic Signal Controller Units

There are two types of traffic signal controller units: those that are designed to NEMA specifications and those that are Type 170/2070 Controller Units (discussed below). Traffic signal controller units manufactured according to older NEMA TS 1 standards do not have internal preemption. These units are generally not capable of accommodating preemption without special external control processes. The current industry standard for both pretimed and actuated traffic signal controller units—the NEMA TS 2 standard—includes provisions for internal preemption.

The Model 2070 Controller Unit includes various provisions for internal preemption; these depend on the specific software packages being run by the microprocessor. The Model 2070 is an open platform advanced transportation controller (ATC) that completely separates hardware from application software by defining a common controller unit hardware on which multiple applications from multiple developers can operate.

The preemption capabilities of traffic signal controller units vary from manufacturer to manufacturer. It is very important to be familiar with the preemption operation provided in each controller unit being used in the field.

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The IEEE 1570 standard for the interface between the railroad active warning system and the traffic signal controller unit is a digital communications interface. Designed according to both fail-safe and closed-loop principles, it provides equivalent functions while maintaining the required safety attributes at the highway-rail grade crossings. Application of the IEEE 1570 interface shall be explored for all new highway-rail construction and modifications. For more information on the IEEE 1570 standard, consult the IEEE Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection (IEEE publication no. 1570-2002).

The traffic signal controller unit shall be able to meet the following functions and requirements:

- Receive multiple preemption inputs and provide multiple routines on a priority basis, at least one of which shall be assigned to railroad preemption. Per CA MUTCD, the railroad preemption shall have priority at a traffic signal provided with emergency vehicle preemption and railroad preemption.
- The preemption feature shall have either an electrical circuit based upon the closed-circuit principle, or a supervised interconnect circuit (preferable) between the control circuits of the railroad active warning system and the traffic signal controller unit.
- Detect broken wires/cables and respond as programmed. One possible programming alternative is to first clear the tracks and then display all-way flashing red signal indications.
- Remotely notify the responsible highway agency as soon as a detectable problem is known to exist at the highway-rail grade crossing.
- Provide an indication, via health check circuit, to the railroad active warning system cabinet when the traffic signals are in flashing mode or “dark” condition for advance preemption.
- Provide a backup power system for the traffic signal controller in the event of a commercial power outage, and remote notification to the highway agency responsible for maintenance of the controller.

3.15.14 Standby Power

In accordance with FRA rules and requirements, railroads install backup power systems to provide power to flashing light signals during commercial power failures. This practice for back-up power is different from traffic signals that are generally dark when the commercial power is off. When traffic signals are dark, motorists in most jurisdictions are expected to know traffic signals are ahead; they are supposed to stop their vehicle at the stop line, and proceed with caution through the intersection as if the dark signal were a stop sign. Since dark traffic signals cannot provide preemption, **backup or standby power systems shall be required at all traffic signals interconnected with railroad signals.**

When traffic signals malfunction, which may cause an all-red flash, the advance preemption time becomes ineffective in helping clear vehicles from the crossing. As a result, vehicles may have less time to clear the crossing. The incorporation of a health check circuit can serve to convert some or all advance preemption time to warning time when this occurs.

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3.16 PREEMPTION

The design of preemption for a highway-rail grade crossing owned or maintained by an agency other than the SCRRA shall be in accordance with the standards used by that agency. The resulting design must be consistent with, or more stringent than, the recommended design practices and standards in this Manual or other applicable SCRAA Standards.

In establishing preemption operations at highway-rail grade crossings adjacent to signalized highway intersections, the highway agency shall coordinate with the SCRRA and the CPUC. The need for preemption, type of preemption, preemption time, right-of-way transfer time, queue clearance time, clear track green interval, etc., for preemption shall be determined by the highway agency and must be agreed to by SCRRA.

3.16.1 Abbreviations and Formulas

The following abbreviations are provided to assist the lead Engineer in preparing the appropriate preemption timing parameters for the highway-rail grade crossing interface. These are also shown in Appendix B.

APT	Advance Preemption Time
BT	Buffer Time
CT	Clearance Time
CSD	Clear Storage Distance
ERT	Equipment Response Time
MHTSPT	Maximum Highway Traffic Signal Preemption Time (MPT)
MT	Minimum Time
MTCD	Minimum Track Clearance Distance
MWT	Minimum Warning Time
QCT	Queue Clearance Time
RWTT	Right-of-Way Transfer Time
ST	Separation Time
TAT	Total Approach Time
TWT	Total Warning Time

MHTSPT (MPT) = RWTT + QCT + ST or CT (whichever is greater)
TAT = MWT + BT + ERT + APT
TAT = TWT + ERT + APT
MWT = MT + CT
TWT = MWT + BT
APT = RWTT + QCT - MWT

RWTT = Minimum green interval, or pedestrian change/walk and pedestrian clearance time (whichever is higher) + yellow change + red clearance

3.16.2 Highway-Rail Grade Crossing Elements that Affect Preemption

The following highway-rail grade crossing and intersection elements affect preemption timing calculations and should be evaluated carefully to determine their impact:

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- Intersection geometry.
- Highway-rail grade crossing geometry
    - Track clearance distance (track clear zone).
    - Clear storage distance; distance from clear track zone to intersection.
- Approaches to the highway-rail grade crossing during preemption calculations.
- Travel times to clear the intersection or crossing.
- Vehicle volumes.
- Frequency of train movements.
- Train stops within the approach to the highway-rail grade crossing (especially for sidings and stations).
- Vehicle queue lengths and dissipation rates.
- Design vehicles and special classes of vehicles, and their operating abilities through the intersection.
- Types of active warning devices.
- Pedestrian activity.

Intersection Geometry

No traffic movements toward the highway-rail grade crossing shall be allowed during preemption. Therefore, the lane configuration and traffic signal operation of the intersection must be evaluated to determine the need for additional lanes and traffic signal modifications to properly control the intersection movements. For example, if the highway parallel with the tracks has a shared through and left lane, and operates with a permissive green ball that allows left turns, the intersection would need to be reconfigured with a left-turn pocket with protected operation so the through movement can operate during preemption, while the left-turn movement toward the tracks is restricted. Alternatively, an R3-2 blankout sign can be installed to prohibit left turns. This must be evaluated first to help define what the advance preemption time needed to provide the appropriate transit from conflicting movements to the preempt sequence.

Minimum Track Clearance Distance

The minimum track clearance distance (MTCD) is measured along the highway from either the highway stop line; warning device; or 12 feet perpendicular to the track centerline; to six (6) feet beyond the furthest track, measured perpendicular to the far rail. The measurement is taken along the centerline or edge line of the highway, as appropriate, to obtain the longer distance. This measurement is used to determine the “clear track green interval”, and is also used to determine the “clearance time.”

Geometric features, such as elevation differences of the tracks or the skewed angle of the crossing, should also be considered when evaluating the effects the track clearance distance has on timing parameters.

Clear Storage Distance

Clear storage distance is the distance available for vehicle storage. It is measured between 6 feet from the rail nearest the intersection to the intersection stop line, or to the normal stopping point on the highway. At skewed crossings and intersections, the 6-foot distance shall be measured perpendicular to the nearest rail, either along the centerline

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or along the edge line of the highway (as appropriate to obtain the shorter clear distance).

Jurisdictions shall often use this distance when calculating the "queue clearance time." Typically, the queue clearance time only includes the area between the MTCD and the intersection if there is not enough room to store a design vehicle. The lead Engineer must work with the local jurisdiction to determine the most appropriate method.

The operating abilities of the design vehicle must be considered when evaluating the queue clearance time; e.g., start-up for a heavy truck loaded down is much slower than for a normal vehicle. The movement the truck makes at the intersection also determines the time required to clear the vehicle.

3.16.3 Railroad Parameters for Preemption

Minimum Time

As per CA MUTCD requirements (Part 8 of Section 8D.06), the minimum time (MT) flashing-light signals shall operate is 20 seconds before the arrival of any train. The exception to this requirement is on tracks where all trains operate at less than 20 mph, and where flagging is performed by an employee. The FRA regulations in Title 49, Code of Federal Regulations (CFR), Part 234.225, state that a highway-rail grade crossing warning system shall be maintained so as to activate in accordance with the design of the warning system, but in no event shall it provide less than 20 seconds of warning time before the highway-rail grade crossing is occupied by train traffic. CPUC General Order No. 75 states that highway-rail grade crossing signals at main or branch line crossings shall be actuated by trains approaching on main tracks through track circuits or by electronic controls for approximately 25 seconds, with limits of 20 to 30 seconds in advance of the fastest train that is normally operated over the highway-rail grade crossing being protected.

Clearance Time

Additional time clearance time (CT) is often provided in excess of the minimum time to account for track clearance distances (track clear zone) that are wider because of a skewed highway-rail grade crossing or because of other specific features (i.e., one track being considerably higher than the other tracks, causing vehicles to slow down in the crossing). Clearance time should also consider the large number of slow vehicles that utilize the crossing; vehicles that take more time to cross than a normal vehicle.

Clearance time is added to the minimum time at a rate of one (1) second for each 10 feet (or fraction thereof) of minimum track clearance distance exceeding 35 feet.

Minimum Warning Time

CA MUTCD mandated minimum time of 20 seconds, and any additional clearance time is known as the "minimum warning time." This is the time between when the railroad warning system is activated and when the train enters the crossing. Refer to SCRRA Signal Standards for SCRRA's standard for MWT.

$$MWT = MT + CT$$

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Equipment Response Time

Equipment response time (ERT) is the additional time provided to account for delays in railroad circuitry before the railroad warning devices are activated. This is typically set at 5 seconds, and is used to establish the approach time for train detection placement.

Buffer Time

Buffer time (BT) is discretionary time determined by the railroad. It is added to the required minimum 20-second time. The railroads add this buffer time for train handling to ensure that a required minimum warning time for track clearance is provided. Refer to SCRRA Signal Standards for SCRRA's standard for BT.

Total Warning Time

The total warning time (TWT) is a combination of each element defined above. Although the equipment response time is never reflected in the total warning time calculation, it should be figured into the approach time and distance for train detection.

$$TWT = MWT + BT$$

3.16.4 Preemption Operational Sequence

FHWA and ITE publications (see Appendix C for references) have tables and charts that help identify different paths that preemption can take during phased operation. These tables and charts indicate the displays that would be shown, depending on what phase was active when preemption input was received. Each highway-rail grade crossing is unique; an engineering study should be conducted for each signalized, intersection near a highway-rail grade crossing to determine the most appropriate preempt operational sequence and the preemption parameters to be implemented.

The traffic signal controller unit shall enter into preemption operation as soon as the interconnect circuit from the railroad active warning system is activated. Some controller units may incorporate a delay time to verify the continuity of the preemption call.

Railroad preemption results in a special traffic signal operation, depending on the relationship of the railroad tracks to the intersection, the number of phases in the traffic signal, and site-specific traffic conditions. Preemption ensures that the actions of the traffic control devices complement, rather than conflict, with the railroad warning system devices. There are three basic elements to railroad preemption:

1. Right-of-way transfer into preempt control
    a. Termination of normal operation
2. Preempt control
    a. Track clear/clear storage interval
    b. Hold/dwell interval
3. Transition to normal operation
    a. Exit phases
    b. Transition to coordination

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Right-of-Way Transfer into Preemption Control

There are many possible transition scenarios, depending upon which interval in the traffic signal control cycle is operational when preempt is initiated. Upon receiving a preempt call, right-of-way transfer of the traffic signal should provide the following basic sequence of operation:

- The length of yellow change and red clearance intervals shall not be altered by preemption for any signal phase that is green or yellow when preemption is initiated.
- Phases that are in the green interval when preemption is initiated, and which shall be green during the track clearance interval, shall remain green, unless doing so creates a left-turn trap. In that case, they must be terminated normally and then restarted after a brief all-red period.

There are two basic scenarios that could occur with the pedestrian walk interval or the pedestrian clearance time, depending on the local jurisdiction's requirements:

- Immediate termination of the pedestrian walk or clearance intervals, with all pedestrian signals faces displaying a steady upraised hand during the track clearance green interval.
- Shortening of the pedestrian walk interval, while allowing the pedestrian clearance interval to follow the normal time.

The signal phase (or phases) controlling traffic, as it approaches the intersection after crossing over the railroad tracks, should be green during the track clearance interval. A yellow change interval shall be provided if a green signal indication was provided during the track clearance interval.

In cases where the approach has a phase that conflicts with the clear track green interval (queue clearance), the right-of-way transfer time (RWTT) shall be maximized when the preempt call is received at the traffic signal controller just after the onset of green. The maximum traffic signal timing required for the transition can vary, depending on the programmed phasing of the controller when the preempt call is established. The maximum RWTT used in the calculation of preemption time establishes the upper limit of the preemption time. This set of circumstances is sometimes referred to as "worst case" scenario.

The RWTT shall be nonexistent or zero if the preempt call is received when the traffic signal controller is already in the phase that is used as the clear track green interval (queue clearance phase). This scenario is usually known as the "best case" scenario. These variations in traffic signal operations can be unsafe if not properly recognized in the timing and design of simultaneous and advance preemptions. The "worst case" scenario shall be used in the determination of maximum preemption time, while both the "best case" and "worst case" scenarios shall be used in the design of any preemption sequence. A "gate-down" circuit should be used when there is a substantial difference between the minimum and maximum RWTT. Some traffic signal controllers are capable of dynamically calculating the maximum RWTT, adding extra time to the track clearance green when the actual RWTT is below maximum. The use of the "not to exceed" timing

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circuit can also be used to control the advance preemption time; however, this type of circuit cannot prevent shorter advance preemption times.

Preemption Hold/Dwell

Limited Service shall be used for traffic signals interconnected to SCRRA active warning devices. The transition into preemption hold occurs after the queue clearance time and separation time (track clearance interval) have been completed, and continues while the train is occupying the crossing. Preemption hold shall remain in effect until the preemption input to the controller unit is removed. The purpose of the preemption hold interval is to allow those movements that do not conflict with the train to proceed through the intersection.

Depending on traffic requirements and the phasing of the traffic signal controller unit, the traffic signal may do the following:

Limited Service (standard)

- Revert to limited operation with those signal indications controlling through and left-turn movements toward the railroad tracks displaying steady red.
- Limited operation shall allow through and left-turn movements away from the railroad tracks to operate.
- With slow-moving trains and long interruption times, the preempt dwell may allow the traffic signal controller to rotate through various defined non-conflicting traffic phases.
- Permitted pedestrian signal phases shall operate normally.
- This operation shall be used only if the highway-rail grade crossing warning equipment includes gates.

Flashing All Red (only with SCRRA approval of standard deviation)

- Go into flashing operation, with flashing red or yellow indications for the approaches parallel to the railroad tracks, and flashing red indications for all other approaches.
- Pedestrian signals shall be extinguished.
- If flashing red is used for all approaches, an all-red or other clearance interval shall be provided prior to returning to normal operation.
- Blank out signs shall be used to prohibit turn movements across the tracks.

Transition to Normal Operation

There are many possible scenarios for the transition from preempt to normal operation; they depend on the type of intersection control that was in effect at the time of preempt (e.g., running free, actuated [semi or full], recalls, coordinated, etc.). The user can define the exit phases that shall operate after the preempt call has been released. Most controllers shall run the normal split time for the exit phases, and then, depending on user-programmed parameters, the controller shall attempt to resynchronize with the defined offset. There are basically three types of resynchronization capabilities (dwell, short way, add only) that control the transition back to normal operation.

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Some controller software has the capability to monitor the coordinated cycle during preemptions so that upon release of preempt, the transition to normal operation is right in step with the coordinated background cycle. The lead Engineer should be aware of the local jurisdiction's preferred operation.

3.16.5 Preemption Timing Parameters

The highway-rail grade crossing elements that affect railroad preemption (as defined in Section 3.16.2) help calculate the timing parameters defined in this section. The narrative below presents preemption timing parameters that should be evaluated carefully and calculated for each appropriate sequence of preemption operation.

- Maximum RWTT
- Minimum RWTT
- Queue clearance time
- Separation time
- Maximum highway traffic signal preemption time
- Advance preemption time
- Total approach time

Maximum RWTT

The maximum RWTT is the "worst case" scenario and consists of the following timing parameters:

- Minimum traffic signal green time or minimum pedestrian walk time, whichever is longest
- Pedestrian clearance time
- Yellow change interval
- All-red clearance interval for opposing traffic

Minimum Green Interval

Two components are necessary to establish the minimum green interval for transition phases:

- Vehicle timing requirements
- Pedestrian timing requirements

If pedestrian timings cannot be truncated, then the vehicle timing requirements must be compared to the pedestrian timing requirements; the greater of the two shall set the minimum green interval. The minimum green time is the shortest green time allowed for each phase. The vehicle timing requirements shall consider both directions of travel, and the time required to clear the intersection if there is not sufficient clear storage distance for the design vehicle. This is very important for simultaneous preempt, where a design vehicle approaching the highway-rail grade crossing from the intersection does not have sufficient storage between the intersection and the crossing. Additional time may be necessary to allow the vehicle to cross the intersection, the insufficient storage area, and the minimum track clear area.

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Pedestrian Clearance Time

The pedestrian clearance time shall adhere to CA MUTCD, Part 4, which addresses the shortening or omission of pedestrian walk and clearance intervals. The application of permitted pedestrian control during the transition into preemption control requires the agreement of the highway agency. The walk interval, if provided, should be at least seven (7) seconds long so that pedestrians will have adequate opportunity to leave the curb or shoulder before the pedestrian clearance time begins. For pedestrians in the crosswalk who left the curb or shoulder during the WALK signal indication, and who are traveling at a normal speed of 4.0 feet per second, the pedestrian clearance time, if provided, should be sufficient to allow them to reach at least the edge of the lane, or a median of sufficient width that they can wait safely. Where older or disabled pedestrians routinely use the crosswalk, a walking speed less than 4.0 feet per second and as low as 2.8 feet per second may be used in determining the pedestrian clearance time.

The “worst case” pedestrian interval is not restricted to pedestrian phases that run concurrently with vehicle phases serving traffic parallel to the tracks (or the track clearance phase). The “worst case” pedestrian interval may be associated with the vehicle phase approaching the highway-rail grade crossing. All pedestrian intervals that are required to time out must be evaluated to determine the maximum right-of-way transfer time.

Minimum RWTT

The minimum RWTT is the “best case” scenario in which all movements away from the tracks are being served when the preempt call is received by the traffic signal controller. If the intersection phasing operates with a permissive left turn for the approach that opposes the movement away from the track, then both movements must be terminated and the clear track interval may be reestablished without serving any other movements. This would consist of the following timing parameters, in sequence:

- Minimum traffic signal green time
- Yellow change interval
- All-Red clearance interval
- Re-establish clear track green

Some traffic signal controllers have the functional capability to lengthen the track clear green interval based on preprogrammed, required maximum right-of-way transfer times. This shall prevent the track clear green interval from terminating before the railroad warning system has been activated.

Queue Clearance Time

The queue clearance time (QCT) of the preempt sequence must be displayed long enough to clear all vehicles that might be stopped within the limits of the highway-rail grade crossing (minimum track clearance distance). Design vehicle characteristics, geometry of the highway-rail grade crossing, and the clear storage distance affect the queue clearance interval.

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There are two possible scenarios that determine the queue clearance interval:

- If there is significant clear storage distance for the design vehicle, the queue clearance time provided must be sufficient to clear the minimum track clearance distance, but it is not required to clear every vehicle from the clear storage area.
- Although it is recommended that the queue clearance time provide enough time to remove all vehicles from the clear storage area, this is a jurisdictionally defined parameter that depends greatly on how long the clear storage distance might be.

The green for the queue clearance time should be displayed until the gates block the path of approaching vehicles, especially if the clear storage distance is insufficient for the design vehicle. The preempt calculations shall ensure that the gates start to descend before the queue clearance green interval terminates. This operation can be achieved through the use of a "gate down" circuit. (Refer to Section 6.1.2 for more information on "gate down" circuits). The queue clearance time should account for the following:

- Minimum track clearance distance
- Clear storage distance
- Start-up time of first vehicle in the queue and subsequent vehicles within the clear storage distance, and the minimum track clearance distance to travel through the intersection

If the clear storage distance has sufficient space for the design vehicle, the queue clearance time need only be sufficient to allow the design vehicle to start up and travel from the highway-rail grade crossing stop line to a point clear of the minimum track clearance distance.

The Los Angeles Department of Transportation "(LADOT) Railroad Preemption Worksheet" should be used to calculate the duration of the queue clearance interval.

Clear Track Green Time

One factor that some highway agencies take into consideration is the design vehicle's ability to clear the railroad gate on the approaching side of the highway-rail grade crossing when given a green indication to proceed. The concern is with the height of the semi tractor-trailer. If the travel lane is close to the railroad gate, there is a good possibility that the gate will start to descend before the design vehicle (a large semi tractor-trailer) has moved far enough forward to prevent the railroad gate from getting trapped between the cab of the semi's tractor and its trailer, thereby snapping the gate from the mechanism. This is a leading cause of broken gates.

Therefore an evaluation/calculation should be conducted to determine if additional time must be added to the queue clearance time to prevent this from occurring. A term used for this calculation is "clear track green interval." The clear track green interval should account for the following:

- Everything defined in the queue clearance interval
- Distance from the vehicle to the railroad mechanism

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- Time required for the design vehicle to start up at the highway-rail grade crossing stop line and move forward, such that the railroad gate will not get trapped between the cab of the semi tractor and the trailer

The time for the design vehicle to start up at the highway-rail grade crossing stop line and travel to a point clear of the minimum track clearance distance is known as the clear track green time (CTG).

The CTG should be compared to the queue clearance time, and the larger of the two should be used in the preemption calculations. The "LADOT Railroad Preemption Worksheet" shall be used to calculate the duration of the queue clearance time and the clear track green time.

Separation Time

Separation time (ST) is the time during which the minimum track clearance distance is clear of vehicle traffic prior to the arrival of the train. The separation time is important under the following conditions:

- High-speed trains are present
- The passing traffic includes a high percentage of trucks and buses

The separation time should be a defined value (typically four to eight seconds) that is based on an engineering evaluation of the highway-rail grade crossing. Variations in traffic signal operation may affect the actual separation time experienced at the crossing. The lead Engineer shall consider the separation time to be at its minimum when the right-of-way transfer time and the maximum highway traffic signal preemption time are the largest. The "worst case" (maximum right-of-way transfer time) and "best case" (minimum right-of-way transfer time) scenarios shall be explored in the determination of maximum highway-rail traffic signal preemption time and separation time.

Maximum Highway Traffic Signal Preemption Time

To provide sufficient queue clearance or clear track green time for a highway-rail grade crossing, the controlling traffic signal must be notified in advance of a train's arrival. The total time required for this function—the advance notification time—is called the maximum highway traffic signal preemption time (MHTSPT). The MHTSPT is the maximum RWTT plus the QCT and the ST.

MHTSPT = Max RWTT + QCT + ST

Advance Preemption Time

Advance preemption time (APT) is the time above and beyond the MWT that is required to provide sufficient RWTT, QCT, or CTG, and ST. The minimum warning time includes any CT that is necessary for the highway-rail grade crossing.

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The formulas shall be used to determine how much time is needed for the traffic signal system to appropriately accommodate an arriving train, and how much time is needed for the rail equipment. These design procedures and the "LADOT Railroad Preemption Worksheet" shall be used to determine the preemption time.

APT = MHTSPT – MWT

Total Approach Time

The total approach time (TAT) is not necessary for calculation of the required preemption time, but it is very useful for the rail operator when determining where to place the detection equipment. The total approach time includes the total warning time, the advance preemption time, and the equipment response time. The total warning time includes the minimum warning time plus the buffer time.

TAT = TWT + APT + ERT
TWT = MWT + BT

3.16.6 Types of Preemptions

Simultaneous Preemption

Under simultaneous preemption, the railroad flashing lights start to flash at the same time the preempt notification is received by the traffic signal controller. Simultaneous preemption is easier to apply and minimizes the variables that might otherwise come into play between the railroad warning system and traffic signal system. However, simultaneous preemption provides limited total warning times and may result in excessive gate down time if additional warning times are included.

To discourage unsafe behavior by impatient motorists, the railroad flashing-light signals shall start to flash and the gate arm shall descend to its horizontal position in a minimal amount of time. The traffic signals shall complete the RWTT and queue clearance time while the railroad warning system is activated. Actual railroad warning times can vary depending on the variable times provided by railroads for each train movement and the phasing of the traffic signal controller when the preempt signal is established.

Advance Preemption

Under advance preemption, the traffic signal controller unit receives the preempt notification from the railroad warning equipment before the railroad warning system is activated. The difference between the MHTSPT and the minimum warning time is called the advance preemption time.

Advance preemption has the following benefits:

- Provides additional track clearance and separation time, which clears the intersection prior to lowering the gates
- Gives vehicles stopped under the gates time to start up and clear the gates before they descend
- Provides adequate queue clearance time

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- Facilitates a smooth transition from conflicting movements to the track clearance phase

3.16.7 Preempt Trap and Potential Solutions

Preempt trap is the condition wherein the queue clearance or the clear track green interval ends before the railroad flashing-light signals start to flash and the gates start to descend. Vehicles will continue to cross the tracks until the railroad gates actually begin to descend. Some vehicles will even try to squeeze under the descending gate. Therefore, the downstream traffic signals must display a queue clearance green indication until the gates have descended. The condition is exacerbated if the traffic signal controller that is used does not have the ability to expand the queue clearance interval time based on the green time already allocated to the conflicting movement. To properly define the preemption parameters, the lead Engineer must thoroughly understand the capabilities of the traffic signal controller that is to be used.

The following factors can also create a preempt trap:

- Any warning time variation that is different from the value used in the initial preemption calculation and programming of the traffic signal controller (if it is implemented without adjustments to the other preempt parameters).
- A longer advance preemption time that is different from the value used in the initial preemption calculation and programming of the traffic signal controller (if implemented without adjustments to the traffic signal controller parameters).

These variations in time create a preempt trap.

Under simultaneous preemption, the railroad warning lights start to flash at the same time the preempt notification is received by the traffic signal controller. Therefore, the queue clearance green interval cannot end before the lights start to flash.

The main cause of the preempt trap is the “uncoupling” of the preempt notification from the warning light activation in the preempt calculations. This results in two separate processes, with no fixed time relationship between them.

The evaluation of the maximum highway traffic signal preemption time should evaluate all possible approaches to determine the maximum right-of-way transfer time. Potential solutions for the preempt trap shall be considered and implemented. The following are some of the methods that may be used to avoid preempt traps:

- Increase the queue clearance green interval in the traffic signal controller unit. The queue clearance green interval should be displayed at least until the gates start to descend, and ideally until the gates block the path of approaching vehicles. The use of older traffic signal controllers cannot guarantee that the gates will be down when the queue clearance green interval terminates. Increasing the clear track green interval may not be the best option, because an increased overall delay to the signalized intersection can cause other congestion-related problems, especially if train volumes are high.

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- Use a controller that is capable of dynamically calculating the RWTT and adding the difference to the QCT to account for the variations in allocated (versus used) green time for the conflicting movements.
- Use a "gate down" circuit to guarantee that the queue clearance phase terminates only after the gates are down. This is the preferred method. Refer to Section 6.1.2 for more information on "gate down" circuits.
- Use the "not to exceed" timing circuit. A not-to-exceed timer may be able to control the maximum advance preemption time, but it will not be able to prevent shorter advance preemption times.
- Use the preempt delay function in the traffic signal controller unit to adjust the actual implementation of the preempt sequence so it more closely coincides with the railroad gate's descent.
- The highway agency should consider changing its traffic signal controller unit specifications, selecting a unit that has the ability to adjust the queue clearance green interval based on variations in the time allocated versus the green time used for the conflicting movements.
- The traffic signal controller should also have the functional ability to recognize a second preempt call during the initial preempt sequence, and either maintain the preempt hold state or reserve the queue clearance interval before the railroad gates begin to descend for the second train.
- Consider the potential of conditional service solutions to prevent the preempt trap. Conditional service allows a signal phase to be served twice during the same cycle.

3.16.8 Preemption Timing Scenarios

The highway agency shall complete the "LADOT Railroad Preemption Worksheet" for both "worst case" and "best case" scenarios (see Section 3.16.4) for simultaneous and advance preemption scenarios, and submit it for SCRRA review. The evaluation shall consider all feasible approaches to the highway-rail grade crossing.

3.16.9 Other Preemption Considerations

Multiple Tracks

Multiple tracks at highway-rail intersections introduce two problems that must be considered when designing a preemption timing plan:

- Additional clearance distance is required during the queue clearance interval. The additional clearance distance increases the clear track green interval and thus increases the total approach time required for preemption.
- The possibility that a second preemption call could be sent to the controller unit immediately after the first preemption input is removed. This occurs when a train traveling on the second track approaches a crossing right after a train on the first track has left the highway-rail grade crossing area.

Older traffic signal controllers units could not recognize a second preempt call that was received while the first preempt was being serviced; the first preempt sequence had to time out first. Typically, the older traffic signal control units would then continue in the hold state even though the railroad gates had risen. If the railroad gates were to rise

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before the control unit recognized the second preempt call, it could lead to skipping the clear track interval and potentially trapping vehicles on the tracks.

Provisions to avoid this problem may include use of an "extended hold" to keep the highway-rail grade crossing gates down until the second train has arrived, as well as use of traffic signal control logic that ensures that a second track clearance can be provided in the event the gates have been raised prior to the arrival of a second train.

When pedestrian clearance time becomes a driving factor for long preemption times and affects levels of service at an intersection, consideration should be given to providing a separate pedestrian input to the traffic signal controller. This is particularly true when there is a station stop in the approach to the highway-rail grade crossing.

The determination whether or not to use the vehicle gate interaction time shall be determined jointly by the railroad and agency. Among the factors to be considered are whether the highway-rail grade crossing has a history of broken gates and the impact on the additional preemption to the level of service.

Multiple Intersections

Where a highway-rail grade highway-rail grade crossing is located between two closely spaced signalized intersections, the two highway traffic signals must be interconnected. Further, their preemptions must be coordinated to permit the tracks to be cleared in both directions.

When the railroad diagonally crosses two interconnected highway intersections, it is normally necessary to clear out traffic on both highways prior to the arrival of the train, requiring approximately twice the preemption time computed for a single approach. It is also normally required to have both railroad warning systems designed to operate concurrently to prevent the traffic signals and railroad warning systems from falling out of coordination with each other. When the railroad warning system is activated, traffic leaving the intersection and approaching either highway-rail grade crossing may queue back into the intersection and block traffic if there is not adequate storage for those vehicles between the highway-rail grade crossing and the intersection. Traffic turning at the intersection toward the other highway-rail grade crossing may also be unable to proceed due to stopped traffic. When this occurs, the following recommended solutions could be used:

- Utilization of advance preemption
- Activating one highway-rail grade crossing before the other
- Extension of gate delay time and minimum warning time
- Use of blank-out turn restriction signs

3.16.10 Preemption Form with Gate Interaction

It is SCRRA's policy for traffic engineers to use the "LADOT Railroad Preemption Worksheet" spreadsheet to determine the amount of advance preemption and green track clearance time needed at preempted traffic signals near highway-rail grade crossings. This form is included in Appendix E, while an electronic version is available to the lead Engineer from SCRRA upon request.

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This tool also provides a graphical depiction of the timeline of events occurring prior to train arrival at the highway-rail grade crossing to help the user visualize the effects of changes in preemption timing. It was designed to simplify the process of determining specific preemption timing values, and to enable the user to experiment with different scenarios based upon engineering judgment. The form computes the necessary times based upon input data regarding specific geometric, signal timing, and railroad equipment parameters. As data is entered into the form, a timeline is updated to show the effect of each entry. Once all the entries are completed, the timelines can be reviewed to determine whether the settings are appropriate for the crossing. This gives the user the ability to experiment with different timings and immediately see the result of those changes.

3.17 RAILROAD FEATURES

Gate Operations Near Stations

Most stations function as both nearside and farside stations (relative to the highway-rail grade crossing and the travel direction of the trains). Figure 3-33 shows a station adjacent to a highway-rail grade crossing. A station functions as a nearside station when a passenger train stops at the station before proceeding through the highway-rail grade crossing. In cases where the station is within the highway-rail grade crossing detection circuitry, but not directly adjacent to the crossing, it is desirable to have the highway-rail grade crossing gates remain raised until the train is ready to depart (assuming there is sufficient distance between the highway-rail grade crossing and the station to allow this protocol). *When stations are very near vehicular crossings, it may be preferable to have the gates remain down while the train is waiting in the station to depart.* This is particularly important at a multiple-track station adjacent to a crossing, where the train stopped at the station may block the view of a second oncoming or overtaking train in the far track.

Figure 3-33. Stations near a Highway-Rail Grade Crossing

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Stations function as farside stations when passenger trains proceed through the highway-rail grade crossing before stopping at the station. The highway-rail grade crossing gates should recover immediately after the train proceeds through the highway-rail grade crossing unless a second train is approaching on the opposite track (in the case of multiple-track stations only), in which case the gates shall react and remain down as required. The station scenarios described above are ideal; however, each situation is unique and should be carefully examined during the diagnostic analysis and design in order to address the challenges at the highway-rail grade crossing and station interface.

Track Structure

The track structure within the highway-rail grade crossing is defined from the subgrade up through the highway surface. All components of the track structure shall be in accordance with SCRRA Engineering Standards. The track structure shall be designed to: minimize maintenance; minimize opportunities for vehicles to become trapped on the tracks due to an uneven surface or failing pavement; and maximize the lifetime of the track structure.

Within the limits of the highway-rail grade crossing, the track structure works in concert with the highway structure to provide a smooth, safe, and efficient means for vehicles to cross the tracks. It is important for the lead Engineer to note that the track structure—designed for maintenance and sustainability—is a significantly stiffer structure than the highway structure on the approaches. With the addition of concrete crossing panels and asphalt overlays, the track modulus is significantly increased. The effects of this increase are mitigated within the structure to maintain an effective highway-rail grade crossing design.

In the design of the track structure, the lead Engineer shall pay close attention to the conditions existing at the highway-rail grade crossing to detect any indications of failure of the surface or structure. The track structure at highway-rail grade crossings shall follow SCRRA design standards and meet the following criteria:

- No exothermic rail welds, insulated joints, or bonds shall be placed in highway-rail grade crossings or within 10 feet of a crossing.
- No turnouts or crossovers shall be located within a crossing.
- The highway-rail grade crossing structure shall be designed to permit the maximum amount of drainage of the track structure. Therefore, it may be necessary to construct underdrains within the vicinity of the highway-rail grade crossing to maximize the highway-rail grade crossing life. Under no circumstances shall street surface or gutter runoff be permitted to flow into the track structure.

Multiple Tracks

Multiple, parallel tracks within the highway-rail grade crossing create additional concerns for the lead engineer. Specifically, the lead Engineer shall mitigate the following concerns during the design of the crossing:

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- The curvature of the railroad tracks and the resulting superelevation of the tracks shall be evaluated and addressed within the design. Refer to Section 3.5 for additional details on geometry.
- The additional time necessary for a pedestrian to traverse the highway-rail grade crossing shall be minimized. This is especially important with skewed crossings.
- Visibility of the second track and the potential for trains approaching on that track shall be considered.
- Visibility of the second track, where a train may be temporarily stopped or spotted on the adjacent track, shall be considered. This is especially important when the second track is a siding or industrial lead where locomotive and railroad cars may be stored for long durations.

Geometry

Horizontal curves on mainline tracks are superelevated to account for vehicle dynamics. This superelevation is accomplished through maintaining the profile of the low rail (the inside rail) and lifting the outside rail to superelevate the track. Traditionally, the railroad profile shown in drawings and track charts refer to the low rail as the profile grade. The horizontal geometry will define the superelevation.

Where highway-rail grade crossings are located within a superelevated curve, the surface of the highway plane should be in the same plane as the top of rails of the superelevated curve.

This minimizes undulations in the highway surface that can cause a vehicle to become stranded on the tracks. Figure 3-34 is an example of superelevated curves within a highway-rail grade crossing that are not on an even plane.

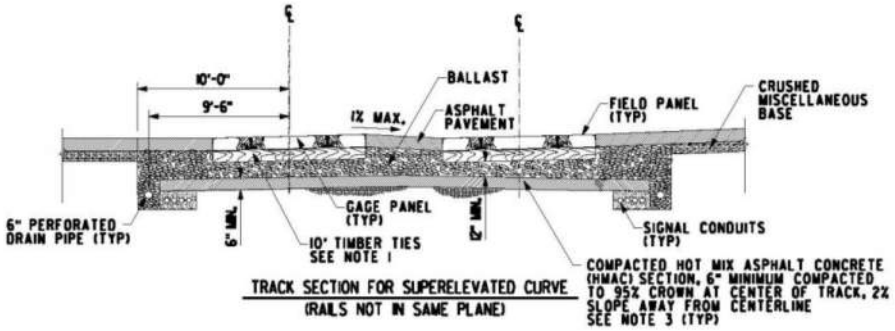

Figure 3-34 Uneven Highway Surface Created by Superelevation

At multiple-track crossings involving concentric superelevated curves, the inside rails for each track may be at equal elevations, while the outside rail are also at equal elevations. The elevations of the four individual rails create an uneven surface through the highway-rail grade crossing.

To avoid this situation, multiple tracks shall be brought to the same plane to provide a smooth and level highway-rail grade crossing plane for the highway (see Figure 3-35 for

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an example). This may not be possible due to railroad vertical profile constraints; therefore, highway vertical profiles should be designed on either side of the highway-rail grade crossing to provide as smooth a transition as feasible, and to provide the proper clearance for the lowest vertical clearance design vehicle. Additional warning signs (such as W10-5) are required to alert motorists of a low-clearance situation.

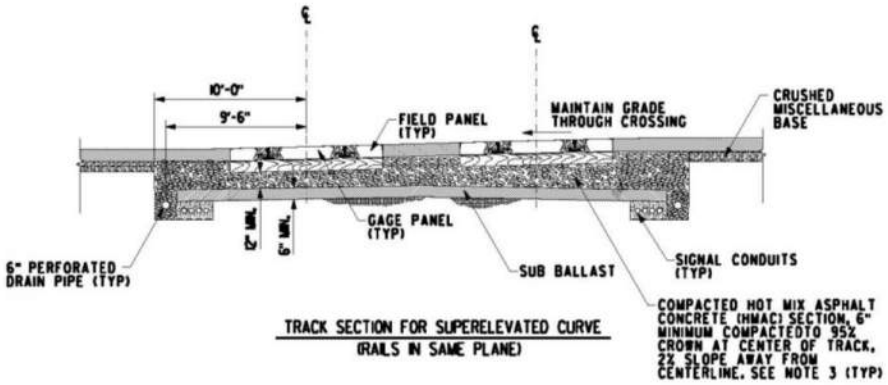

Figure 3-35. Superelevation with Rails in the Same Plane

Special Trackwork

Highway-rail grade crossings located in close proximity to special trackwork are discouraged. The main concerns about the proximity of special trackwork to a highway-rail grade crossing are as follows:

- Additional train movements with switching movements.
- Exothermic welds and insulated joints generally cannot be located within the limits of the grade crossing.
- Signal design concerns related to adjacent railroad signals associated with the special trackwork.
- Additional prolonged railroad activity within the highway-rail grade crossing limits related to industry lead service.

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Figure 3-36. Location of Adjacent Turnouts and Crossovers

The point of switch for turnouts and crossovers should be located a minimum of 60 feet outside of the limits of the crossing. Figure 3-36 shows such an application. When turnouts and crossovers are close to the highway-rail grade crossing, the lead Engineer shall consult SCRRA about the railroad's need for special trackwork. The lead Engineer shall refer to SCRRA communications and signal Engineering Standards.

Utilities

The term "utilities" includes electric power, cable TV, and lines for: telephone, water, sewer, gas, communications, street lighting, traffic signals, waste water, fuel, and oil.

Railroad right-of-way typically contains a wide variety of utilities that are related to the operations of the railroad and other public or private uses. The design shall address the location of each affected utility and mitigate the impacts on these utilities. The lead Engineer shall obtain the necessary right-of-way information regarding the license/easement agreements related to the utility, and address any modifications that may be required. This includes potential limitations on access as a result of the construction of the crossing, the preservation of access for the utility for maintenance purposes, and safety impacts of the highway-rail grade crossing related to the utility.

After the acceptance of plans by SCRRA and other stakeholders, the lead Engineer shall submit and obtain written approval of design from all utilities within the construction area. This includes all utilities that have established prior use of the right-of-way under easement or license agreements.

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For a new highway-rail grade crossing, existing underground and aboveground utilities shall be identified prior to any construction. The appropriate regional notification center [Underground Service Alert (DIGALERT) at (800) 227-2600], railway companies, and utility companies shall be notified prior to performing any excavation close to any underground pipeline, conduit, duct, wire, or other structure. Refer to SCRRA's website http://www.metrolinktrains.com to ensure proper contract information and phone numbers. SCRRA is not a member of DIGALERT. It is, therefore necessary to call SCRRA's signal department phone number (refer to SCRRA's website) to mark, at the highway agency's or contractor's expense, signal and communication cables and conduits. In case of signal emergencies or highway-rail grade crossing problems, the contractor shall call SCRRA's 24-hour signal emergency number. When the new crossings involve gates, the minimum required clearance from existing overhead wires (as specified in CPUC GO-95) shall be maintained, and gate foundations checked for utilities.

The lead Engineer shall locate and note all utilities in place at the crossing. These utilities shall be confirmed by potholing or other method to determine location and depth. This is especially important where additional highway-rail grade crossing devices are to be installed or existing devices relocated. The lead Engineer shall address the location of any utilities in relation to any device foundations or other structural considerations.

The installation of conduits or encasements under the railroad shall be in accordance with SCRRA Engineering Standards for utility crossings. In addition, the lead Engineer shall comply with the SCRRA standards for details on jacking pipes or conduits under SCRRA tracks.

Signs and Billboards

Advertising billboards are often located along the open spaces of the railroad right-of-way. These are to be treated as individual right-of-way items that shall be addressed early in the design phase. The lease agreements between the two parties often create special and time-consuming circumstances that must be addressed early to avoid delays if the billboards or signs must be relocated. The removal or relocation of a billboard shall be coordinated with the right-of-way departments of SCRRA member agencies.

Billboards and sign structures can create visibility problems and distract the motor vehicle operator's attention from the warning devices locate near or at the highway-rail grade crossing. Figure 3-37 illustrates how billboards and signs can block the view of a crossing.

In many cases these billboards are mounted on substantial columns, impeding the view down the railroad right-of-way. Signage placed within or adjacent to the right-of-way for traffic control or other purposes must also be addressed during design. When developing the overall design of the crossing, the lead Engineer shall consider the current locations of existing signs and billboards, and the ultimate effect that this placement will have on the operation of the crossing. Signs that could impede visibility should be noted during the diagnostic review and, if necessary, recommendations should be made regarding the treatment of these signs.

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Figure 3-37. Billboard within the Right-of-Way

Enhancements to highway-rail grade crossings that involve improved pedestrian access, additional warning devices, widened highways, and additional traffic signal equipment may be affected by billboards located adjacent to the crossing. It may be necessary to remove or relocate the billboard prior to construction.

3.18 FUTURE IMPROVEMENTS

Enhancements to the highway-rail grade crossings, such as median islands, traffic signal system, preemption, widening, pedestrian and vehicular facilities, should be designed and constructed, such that future railroad improvements [second or more track(s)] and/or other railroad improvements can be accommodated without the need to completely modify the current elements of the crossing. *The lead Engineer or designer should be cognizant of the potential to improve the highway-rail grade crossing system for future SCRRA tracks and other facilities, and should incorporate into the design the necessary accommodation of future railroad improvements.*

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4.0 PEDESTRAIN-RAIL GRADE CROSSINGS

4.1 GENERAL

Pedestrian treatments shall be installed at pedestrian-rail grade crossings in accordance with the Pedestrian-Rail Grade Crossing Design Consideration Flowchart in Figure 4-2. Pedestrians at highway-rail grade crossings present unique challenges to the lead engineer. Many of the same considerations given to motor vehicles-such as channelization, signs, and warning lights-also apply to pedestrians. This section of the Manual will discuss and define the components and treatments that together, all or in part, comprise a pedestrian-rail grade crossing and then will describe the applications at the different types of pedestrian-rail grade crossings. Pedestrian-rail grade crossings can be placed in four different categories:

- Pedestrian-rail grade crossings adjacent to a motor vehicle crossing
- Pedestrian-rail grade crossings at stations adjacent to motor vehicle crossings
- Pedestrian-rail grade crossings at stations
- Pedestrian-rail only crossings

Each of these types of pedestrian-rail grade crossings generates unique challenges that need to be addressed during the design phase. In general, pedestrian-rail grade crossing design should facilitate efficient and safe travel across the railroad right-of-way, and shall be in accordance with SCRRA's Engineering Standards. It is desirable that the pedestrian-rail grade crossing have the following features:

- A smooth, easily traversed surface that does not impede individuals with disabilities, strollers, or carts, incorporated into the adjacent sidewalk topography.
- Clear striping and signage that avoids confusing directions or features, a relatively straight path that is clearly marked and easily accessible throughout the footprint of the crossing and a readily accessible means of exiting the crossing.
- Deterrents such as fending and gates that minimize trespassing into prohibited areas of the railroad right-of-way.

4.2 PEDESTRIAN-RAIL GRADE CROSSINGS AND GRADE SEPARATIONS (AT STATIONS)

Pedestrian-rail grade crossings at stations shall be evaluated for grade separation per the following criterion, along with an analysis of the train volumes and pedestrian volumes. The lead Engineer will work and coordinate with SCRRA for the determination of the need for grade separation:

- One main track plus a platform — Pedestrian–rail grade crossing acceptable
- Two main tracks plus two platforms — Pedestrian-rail crossing acceptable consider Pedestrian grade separation > 50 daily trains
- Three or more main tracks — Grade separation recommended

4.3 TEN-MINUTE WALK RULE

In order to determine if a crossing has, or has the potential for, pedestrian activity, pedestrian-rail grade crossings shall be evaluated using the 10-minute walk rule. This

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rule is based upon research conclusions that pedestrians will walk ten minutes to reach their destination. This equates to a one-third to one-half mile walk. Therefore, if the crossing is located within this radius of schools, hospitals, substantial pedestrian generators or other facilities, then the lead Engineer should consider features pedestrian traffic features over the crossing.

4.4 PEDESTRIAN AND TRACK STRUCTURE INTERFACE

The track structure is made up of many components. The component that most affects the pedestrian-rail grade crossing is the flangeway. The flangeway is the inside edge of the rail and the crossing surface and allows the flange of the train wheel to ride along the rail.

The ADA limits the width of the flangeway gap to a maximum of two and a half (2½) inches (ADAAG 10.3.1). The surface of the crossing shall be level and flush with the top of the rail at the outer edge and between the rails. Freight railroads require a three (3) inch flangeway gap at installation. This allows for a wear of about one (1) inch in regular use. SCRRA standards call for a rubber flangeway filler for all new or improved crossings that accommodates the ADA requirement while allowing the free movement of rolling stock over the crossing.

4.4.1 Visibility

Visibility between trains and pedestrians shall be considered during the diagnostic analysis and design of the crossing. The design should provide the pedestrian reasonable visibility of a train upon its approach and departure. This is important when dealing with a multi-track crossing, when the view of an approaching train may be blocked by an additional train. In general, the installation of active warning devices including automatic gates and appropriate fencing will mitigate for the lack of visibility. During the initial site assessment, the lead Engineer shall examine all features in and around the crossing that could impede pedestrian visibility.

Many features present at a highway-rail grade crossing can hinder visibility for the pedestrian. These features may include the following:

- Buildings and/or walls
- Billboards, signs, and utilities
- Trees and other vegetation
- Traffic patterns of motor vehicles at the crossing
- An adjacent bus stop shelter and bus operations associated with that shelter
- Trains stopped at multiple-track crossings
- Adjacent developments such as housing units, buildings, and industrial parks
- Railroad features such as shelters

The lead Engineer shall consider the overall visibility at the crossing from the pedestrian's perspective, and endeavor to mitigate deficiencies that could diminish the intrinsic safety of the crossing. During the diagnostic analysis and inventory, the diagnostic team shall consider the following and take appropriate action:

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- Diagram the crossing to show the obstructions to pedestrian visibility, and incorporate solutions into the design of the crossing.
- Examine each of the features at the crossing, and thoroughly explore the risk arising from those features, and may include recommendations to remove a feature that is severely impeding pedestrian visibility.
- Additional devices or signage may be necessary to offset the lack of visibility created by the obstructions; however, placement of each of these devices should be carefully examined for compatibility with existing features.

4.5 AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act Guidelines (ADAAG) govern the design and construction of any features associated with pedestrian crossings. **ADA guidelines must be incorporated into the overall design for pedestrian-rail grade crossings.**

Detectable warning strips shall be applied to the sidewalk ahead of the warning device in order to show pedestrians where to stop when a train is approaching.

The placement of the detectable warning strip shall follow the standards outlined in SCRRA's Engineering Standards.

4.6 WARNING DEVICES

Pedestrian-rail grade crossing active warning devices shall be installed 15 feet from the centerline of the track, as measured from the center of the mast at new or existing crossings. A design deviation may be requested for active warning devices installed less than 15 feet, but in no case shall an active warning device be installed less than 12 feet from the centerline of track.

4.7 CHANNELIZATION

The design of pedestrian-rail grade crossings shall provide clear, well-defined travelways throughout the crossing and should discourage improper pedestrian behavior, such as circumventing the gates, walking onto the railroad right-of-way, or walking onto the highway. Fencing or railing should be provided along the sidewalk to direct pedestrians along the proper path, but coordination with the SCRRA Signal Department is recommended to ensure this railing, to the extent possible, does not block or impede maintenance access to railroad signal devices, and does not interfere with the location of the devices used for sealing the corridor. This can be tubular steel railing, ornamental fencing, or welded wire mesh fencing. The type of fencing to be used shall be discussed with the stakeholders.

Additional controls used to identify the pedestrian travelway include striping and raised markers. Bold, white striping, with reflectorized markers, is used to delineate the pedestrian's safest path across the crossing. Refer to SCRRA Engineering Standards for examples of these treatments.

The channelization of pedestrians is particularly effective when attention can be directed along a given line of sight. By controlling the direction taken by pedestrians approaching a crossing, the lead Engineer may be able to induce pedestrians to look in a given direction. For example, the creation of a zigzag pedestrian path forces the pedestrian to

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look along both approaches of the crossing, maximizing the likelihood that the pedestrian will see trains approaching from either direction. Figure 4-1 illustrates this type of channelization on the approach to the pedestrian-rail grade crossing.

Pedestrians sometimes trespass into prohibited areas of the railroad right-of-way. This problem requires special consideration. Traditional designs have often used fencing to keep pedestrians out of protected areas. “No Trespassing” signs, complete with warnings about enforcement and prosecution, have also been used. During the diagnostic review, the team should review pedestrian access to the railroad right-of-way and develop safe and effective solutions to preventing unwanted trespassing.

Figure 4-1. Pedestrian Channelization

4.7.1 Center Fence (Inter-Track Fence)

At stations, track centers shall be a minimum of 18 feet but not more than 25 feet to accommodate a center track fence. Such fences must have a 9’-0” minimum (on tangent) clearance from each track center. The fence shall encompass the platform and channel the passengers to crossings at the end of the platforms. Where tracks cannot be widened to accommodate a center fence, proper signage should be installed to deter pedestrians from crossing the tracks except at the proper and designated locations.

4.7.2 Refuge Areas

SCRRA standards for pedestrian applications include an area where pedestrians crossing the track can seek refuge. SCRRA standard pedestrian channelization concepts include a refuge area where the pedestrian can wait as a train approaches. This refuge area is not intended as a location where a pedestrian can wait for the train, but rather as a safe harbor should the pedestrian hesitate between the down gates and the track. Refer to Engineering Standards for examples of these refuge areas. The

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refuge area shall incorporate a swing gate (see Section 4.8.3 for additional information) to allow pedestrians to exit the refuge area away from the tracks.

4.8 PASSIVE DEVICES

4.8.1 Signage

Signage is utilized throughout a crossing to guide pedestrians safely through it. Of particular note are the signs warning pedestrians of multiple tracks, and the possibility of multiple trains at the crossing. These signs should be used at the approaches to the crossing. The potential presence of a second train is an important consideration when applying signage to the crossing.

4.8.2 Pavement Markings

Pavement markings should generally consist of white striping with reflectorized indicators. Refer to the Engineering Standards for details on pavement markings.

4.8.3 Swing Gates

Pedestrian swing gates have two distinct functions: they can serve as an entry/exit swing gate, or strictly as an emergency exit gate, as explained in further detail below:

- As an entry/exit swing gate, the swing gate is intended, when not used with a pedestrian-rail grade crossing gate, to slow pedestrians and encourage them to stop, look both ways down the track for approaching trains, and then pull the swing gate open to safely cross the tracks. A “LOOK” sign, as detailed in the Engineering Standards, shall be mounted on the approach side on the swing gate or on a separate post next to the swing gate. Particularly at pedestrian-only crossings without active warning devices and automatic gates, the pedestrian must determine if there is sufficient time to cross the tracks in front of an approaching train. The diagnostic team should provide the pedestrian with adequate visibility. Appropriate “Push Gate To Open” signs on the track side and “Pull Gate To Open” signs on the approach side shall be mounted on the entry/exit swing gates.
- As an emergency exit gate, the swing gate is incorporated with an active warning device, so pedestrians shall have an escape route in the event of occupying the crossing during the time when a crossing gate is activated. The gate shall only swing away from the crossing, with clearly marked “Push Gate To Open” signage on the track side. The approach side of the swing gate shall have signage marked as “Exit Only” to deter pedestrians from using the gates and entering the crossing while the active warning gates are activated.

Refer to SCRRA Engineering Standards for details on the swing gates and signs. The responsibility for the installation and maintenance of swing gates shall be covered in a C&M Agreement.

4.9 ACTIVE DEVICES

Active warning devices applicable for pedestrian-rail grade crossings are usually similar to those for vehicles. Active pedestrian warning devices include pedestrian gates. Refer

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to Engineering Standards for pedestrian warning devices.

Active warning devices that are used to aid pedestrians take on a variety of configurations. Refer to Engineering Standards for examples of these configurations.

4.10 PEDESTRIAN-RAIL GRADE CROSSING TYPES

The design of a pedestrian-rail grade crossing should provide an environment that provides ample opportunities for pedestrians to observe and comply with the warning devices and stay clear of any approaching train traffic. The option to select passive and active warning devices depends upon the four types of crossing listed at the beginning of this section. With each type, the following factors need to be considered:

- The number of and type of tracks (i.e. main, siding, industry lead)
- The proximity to rail passenger stations
- The proximity to other rail facilities such as sidings, yards, industry spurs
- The skew and vertical profile across the crossing
- Visibility restrictions
- The volume and pattern of pedestrian activity
- Current and future development in and around the crossing
- Right-of-way constraints

4.10.1 Pedestrian-Rail Grade Crossings at Highway-Rail Grade Crossings

Most pedestrian-rail grade crossings on SCRRA's system are of the type where the pedestrian-rail grade crossing is a part of the highway-rail grade crossing and is located on one or both sides of the highway and the highway-rail grade crossing.

When beginning the design for modifications to a highway-rail grade crossing, the lead Engineer should determine whether or not the local highway agency allows pedestrians along the highway and to what degree pedestrian facilities are already in existence. A flowchart detailing the decision process for determining the type of pedestrian treatments warranted for a highway-rail grade crossing is provided in Section 4.11.

4.10.2 Pedestrian-Rail Grade Crossings at Highway-Rail Grade Crossings and Adjacent to Rail Passenger Stations

Combined pedestrian-rail grade and highway-rail grade crossings near rail stations are considerably more complex than pedestrian crossings not near a rail station and represent a special case of pedestrian-rail grade crossings. Some of the complicating factors are as follows:

- These pedestrian-rail crossings may be used by large groups of commuter rail patrons accessing the platforms and by pedestrians crossing the tracks.
- The level of pedestrian activity at a station crossing is directly associated with the departure and arrival of passenger trains and other transit such as buses and shuttles; it is also associated with the presence of parking lots.
- The stopping patterns and dwell times of trains affect the performance of the active warning devices.

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The lead Engineer shall follow the same design process used for a pedestrian-rail grade crossing adjacent to a highway-rail grade, and determine the appropriate pedestrian treatments as provided in Section 4.11.

4.10.3 Pedestrian-Rail Grade Crossings at Stations (not located at Highway-Rail Grade Crossings)

Pedestrian-rail grade crossings at stations are primarily used by pedestrians accessing the platforms; however, in some circumstances they may also be used by pedestrians to cross the rail corridor.

In general, the level of pedestrian activity at a station crossing is directly associated with the departure and arrival of passenger trains. Because of this, **station pedestrian-rail grade crossings shall provide "full pedestrian treatments" (signage, channelization, active pedestrian warning devices with gates, and swing gates) and fencing, and shall not cross more than two tracks.**

There are two types of pedestrian-rail grade crossings at stations: (1) pedestrian-rail crossings grade crossings located past the ends of platforms (the new recommended design practice and standard); and (2) existing pedestrian-rail crossings in the middle of the platform (this design practice will no longer be allowed).

- **Station pedestrian-rail grade crossings shall be installed approximately 60 feet from the platform, and include full pedestrian treatments.** It is desirable to have the gates recover during normal station dwell time. Fencing should properly channelize pedestrians across the tracks at the pedestrian-rail grade crossing and deter the public from taking a "short cut" and trespassing across the tracks in prohibited areas.
- **New pedestrian-rail grade crossings in the middle of platforms shall not be allowed.** At existing stations that have a pedestrian-rail grade crossing in the middle of platform, the crossing shall be relocated at the end of the platform, or an underpass shall be constructed during major modifications to the station.

4.10.4 Pedestrian-Rail Grade Crossings (for Pedestrians Only)

New pedestrian-rail grade crossings shall not be allowed unless one or more existing pedestrian-rail or highway-rail grade crossings are closed.

Pedestrian-rail grade crossings shall follow the same design process as a pedestrian-rail grade crossing adjacent to a highway.

Pedestrian-rail grade crossings are typically associated with walking paths and bike trails adjacent to the railroad right-of-way. Pedestrians may be tempted to take shortcuts and trespass rather than use the designated pedestrian crossings. The lead Engineer shall pay careful attention to this hazard, and place the proper fencing and channelization to address this undesirable behavior. Where the right-of-way permits, the use of zigzag channelization, referred to in Section 4.7, should also be considered by the diagnostic team.

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4.11 DESIGN PROCESS AND CONSIDERATION TABLE

Pedestrian-rail grade crossings should, in combination with the horns on locomotives, provide adequate warning devices which allow pedestrians and bicyclists to be warned of approaching trains and take appropriate action. During the design of the pedestrian-rail crossing, the lead Engineer shall consider these factors: 1) existing and future pedestrian and bicycle activity; 2) type of path (pedestrian only or combined pedestrian and bicycle); 3) number of tracks, track speeds, and number of trains; 4) proximity of rail passenger stations; 5) establishment of quiet zones; 6) travel distance across tracks to reach a location well outside of train dynamic envelope; 7) skew and vertical profile across the rail crossing; 8) visibility restrictions; 9) volume of pedestrian activity; 10) type of pedestrian activity (i.e., school, transit, hospital); 11) current and future development (including transit service and transit oriented development) in close proximity to the pedestrian-rail crossing; and 12) right-of-way constraints.

In the discussion of the design considerations, the term **"full pedestrian treatments" shall include signage, markings, channelization, fencing, active warning devices with gates, and swing gates.** *SCRRA's policy and practice is to apply full pedestrian treatments to highway-rail grade crossings consistent with the Pedestrian-Rail Grade Crossing Design Flowchart in Figure 4-2.*

The process in Section 4.11 and Figure 4-2 shall be used to determine the designs of pedestrian-rail grade crossings and appropriate warning treatments. This process shall be similar for any type of pedestrian-rail grade crossing, and defines the SCRRA recommended approach to the application of pedestrian treatments at pedestrian-rail grade crossings.

Decision Point 1

The existence of pedestrian activity shall be determined. This includes sidewalks leading up to the right-of-way, or evidence of pedestrians crossing at that location. The lead Engineer shall determine from the Highway Agency the existing and desired future status of any pedestrian related facilities in the highway and railroad rights-of-way, including easements, licenses, and C&M Agreements. SCRRA-recommended design practices and standards call for the addition of pedestrian treatments if the highway agency and the SCRRA are in agreement, and the highway agency legally allows pedestrians to utilize the highway right–of-way for crossing the track(s). The lead Engineer shall take the following actions when evidence of activity exists without pedestrian facilities:

- Determine the level of pedestrian activity and if the pedestrian activity is legal and supported by the local highway agency.
- Work with the local highway agency to modify sidewalks and bring in compliance with ADA requirements.
- If warranted, the design shall provide sidewalks over the railroad right-of-way and tracks.
- If warranted, take steps to prevent possible trespassing.

Decision Point 2

If the pedestrian-rail grade crossing is to be included in a quiet zone, then full pedestrian treatments for safety enhancements and quiet zone signage shall be applied.

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Decision Point 3
The type of pedestrian-rail grade crossing is analyzed at this step. A station pedestrian-rail grade crossing or a pedestrian-rail grade crossing combined with a highway-rail grade crossing adjacent to the station (including any light rail stations located on within a common rail corridor) require full pedestrian treatments.

Decision Point 4
Is the pedestrian-rail grade crossing located within a 10-minute walking distance of a school, hospital, or other facility that can be expected to support disabled people? If the answer is yes to any of the listed facilities, then full pedestrian treatment shall be applied. If the answer is no, then is there significant pedestrian activity?

In order to answer no to whether there is significant pedestrian activity, the lead Engineer shall conduct a study to determine: the volume of pedestrian use, both on-peak and off-peak hours; the types of pedestrians (i.e., school children, elderly, disabled, bike riders, etc.); and pedestrians' behavior patterns (i.e., are pedestrians behaving in a safe manner when using the crossing and cognizant of potential train activity?). The lead Engineer will then discuss the results of this study with SCRRA and CPUC for clear consensus with the Safety Review Team as to the presence or absence of significant pedestrian activity. Full pedestrian treatments shall be applied for a yes answer to any of these questions.

Decision Point 5
Does the crossing have three or more main tracks? If the answer is yes, the pedestrian-rail grade crossing shall be grade separated. The grade separation can be an overhead or an underpass.

Decision Point 6
Does the crossing have two main tracks? This decision point is arranged so that a yes answer for this question accounts for two tracks in rural areas that see few pedestrians. In this case, it may not be appropriate to install full pedestrian treatments, but a request for a deviation not to do so must be submitted to the SCRRA. In an urban/metropolitan environment, full pedestrian treatments shall be applied when multiple tracks are in a location with limited visibility.

Decision Point 7
Does the crossing location have restricted visibility? Full pedestrian treatments shall be applied where there is limited visibility at crossings.

Decision Point 8
Is the right-of-way necessary to comply with the Manual unobtainable? If not, then full pedestrian treatments are required. SCRRA Standard Drawings include variations to the standard configuration, depending on the available right-of-way. In cases where the right-of-way required for the use of one of these standard applications cannot be acquired due to existing property uses, or because of other conditions, the lead Engineer shall request a deviation from standard and design a non-standard application.

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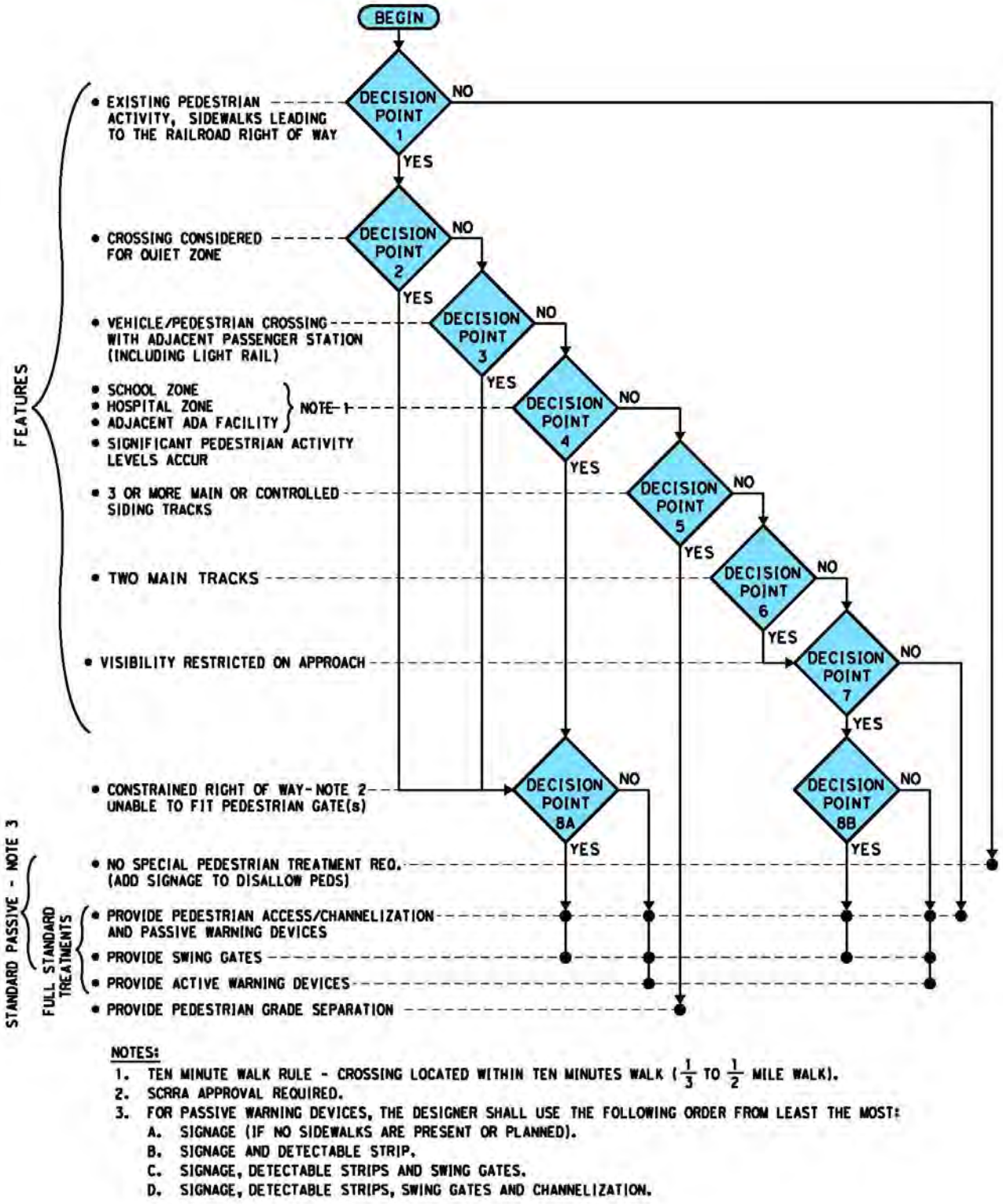

Figure 4-2. Pedestrian-Rail Grade Crossing Design Consideration Flowchart

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5.0 GRADE SEPARATIONS

A “grade separation” is a means of separating the highway or pedestrians from the railroad tracks. Pedestrian grade separations are discussed briefly in Section 4 of the Manual. These may be accomplished with an underpass (the highway or pedestrian pathway passes under the railroad) or an overhead (the highway or pedestrian pathway crosses over the railroad). Outside of full highway-rail grade crossing closure, this is the most effective means of eliminating hazards related to these types of crossings. Refer to SCRRA’s Grade Separation Guidelines, located on the SCRRA website: http://www.metrolinktrains.com, for additional information on grade separations within SCRRA’s system.

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6.0 RAILROAD ACTIVE WARNING AND TRAFFIC SIGNAL SYSTEM INTERCONNECTION CIRCUITS

6.1 INTERCONNECTION DESIGN

6.1.1 Background

Knowledge in the field of traffic signal preemption continues to evolve. Before designing a traffic signal preemption circuit, the lead Engineer should review the latest guidelines regarding traffic signal preemption as prepared by the Institute of Transportation Engineers, AREMA, CAMUTCD, CPUC, and other knowledgeable parties. Circuits described below are based on fail-safe closed loop methodology. A vital serial data circuit in accordance with IEEE Standard 1570-2002 may be used in lieu of the referenced circuits. Design and testing of traffic signal preemption interconnection circuits must be coordinated with the railroad and the agency having jurisdiction.

6.1.2 Interconnection Circuits

Older, widely-used traffic signal controller units use interconnection circuits between the railroad active warning system cabinet and the traffic control signal cabinet for preemption. This interconnection circuit consists of two wires/cables buried in the ground between the above two points. The approach of a train to a highway-rail grade crossing activates the electrical circuit, which in turn notifies or issues a call to the traffic signal controller preemptor. This establishes and maintains the preemption condition during the time the highway-rail grade crossing warning system is activated.

If there is a break in either or both wires or cables of the interconnection circuit (as, for example, when an excavation contractor inadvertently breaks the wires or cables), the traffic signal controller unit would respond as if a train were approaching and clear vehicles off the tracks—even though a train may not be approaching. The traffic signals remain in the preemption mode as long as the circuit remains open. If a train approaches during this scenario, the railroad active warning devices shall activate, yet the traffic signal preemption cannot be reinitiated to clear vehicles off the tracks.

One potential problem with the two wire/cables interconnection is a short in the circuits. If the wires/cables between the traffic signal control cabinet and the railroad active warning system cabinet became shorted together, the preemption relay in the traffic control signal cabinet could be falsely energized, even if the relay contact opened. In this case, the active warning devices would operate, but the traffic signal controller unit would not receive the preemption input. To address these potential problems, a supervised double-break, double-wire circuit shall be installed between the railroad and the traffic signal control system.

Supervisory Circuits

In order to detect a shorted or open interconnection circuit, two additional wires are used to provide a supervised circuit. The energy source originates at the traffic signal controller: two wires provide a return path, verifying the railroad preemption control relay is energized and there is no call for preemption. The two additional wires verify circuit integrity when the railroad issues a call for preemption. The circuit logic is “Exclusive OR.” One circuit must be energized and the other de-energized. If both circuits are

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shown to be energized and both appear de-energized, it indicates a problem with the interconnect circuit. In that case, the traffic signal controller should assume a state known to be safe and issue a notification that there is a circuit deficiency.

Table 6-1 below identifies the number of wires and functions for the supervised interconnection circuit for simultaneous and advance preemptions:

Table 6-1. Interconnect Wire Assignments

Wires	Simultaneous Preemption	Advance Preemption
1	Source energy positive	Source energy positive
2	Source energy negative	Source energy negative
3	Preempt relay positive	Preempt relay positive
4	Preempt relay negative	Preempt relay negative
5	Supervision relay positive	Supervision relay positive
6	Supervision relay negative	Supervision relay negative
7		Gate down relay positive
8		Gate down relay negative
9		Traffic signal health positive
10		Traffic signal health negative

Gate-Down Circuits

A preempt trap condition occurs when the clear track green interval ends before the flashing-light signals start to flash and gates start to descend. It can occur with advance preemption.

One of the solutions to avoid preempt trap is to use a “gate down” circuit. The purpose of the “gate down” circuit is to prevent the traffic signal from leaving clear track green interval until it is determined that the gates controlling access over the tracks are fully lowered. The “gate down” circuit notifies the traffic signal controller unit when the gates controlling access over the tracks on the approach to the intersection have either fully lowered or the train has occupied the crossing. At the beginning of preemption, the traffic signal controller unit shall change to the clear track green interval as usual, but shall dwell in the clear track green interval until the “gate down” confirmation is received, or until a user-defined maximum time has expired.

Traffic Signal Health Check Circuits

A health check circuit provides an indication to the railroad active warning system cabinet when the traffic signals are in flashing mode or dark, such as when the controller is in failure. This health check circuit requires additional wires/cables between the traffic control signal cabinet and the railroad active warning system cabinet. Consideration should be given to a fail-safe design for the health check circuit so that there shall be no case in which the circuit shall remain energized while the traffic signals are flashing or dark.

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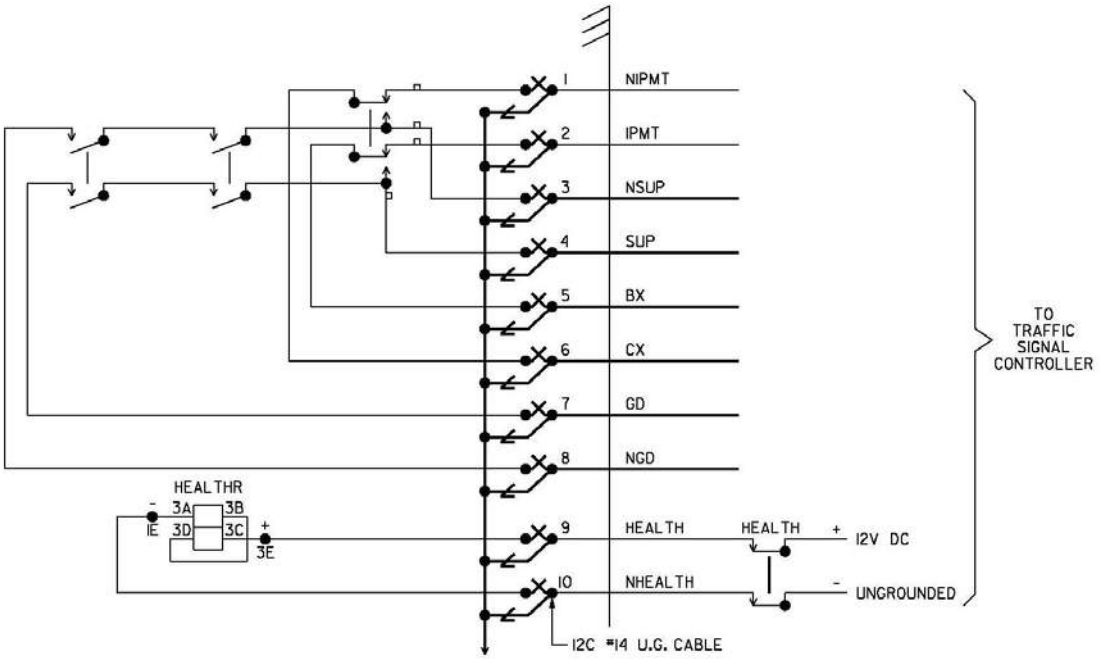

Figure 6-1. Interconnection Circuits with Supervision, Gate-Down Circuitry, and Health Circuit

Interconnection Circuits

In Figure 6-1 above, energy (BX, CX) is supplied to the railroad from the traffic signal controller. The TCPR is the relay that provides the call to preempt. This relay is normally energized and returns energy to the inputs of the traffic signal controller. When a train is detected and the call for preemption is generated, the TCPR is de-energized and the energy is returned to the traffic signal controller on the wires labeled SUP and NSUP. This is the supervisory circuit. The supervisory circuit must be de-energized and the preemption circuit energized, or vice versa. This indicates the integrity of the interconnection circuitry to the traffic signal controller. If both are energized, or both are de-energized, that is indicative of a fault in the interconnection.

The wires labeled GD and NGD are energized when the gates approaching the signalized intersection are down after a call to preempt. Upon receipt of these inputs, the traffic signal controller can terminate track clearance green (TCG) and transition to the phases allowed during preemption. These gate-down contacts may be bypassed by contacts of the island circuit so that TCG can terminate when the island is occupied in the event of a gate that does not fully lower.

The health of the traffic signal controller is communicated to the railroad via the health relay. If the traffic signal controller is not functioning or in all-flash mode, the health relay shall be de-energized; thus the highway-rail grade crossing warning system may cause the gates to be down longer for an approaching train, since the traffic signals shall not be able to clear out traffic as designed.

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When a serial connection is used, this information and more can be conveyed between the railroad control devices and the traffic signal control devices. This enhances the operation of both systems.

6.1.3 Not-to-Exceed Timing Circuits

Railroads sometimes use the “not-to-exceed” timing circuits to control the maximum advance preemption time. This helps in eliminating a preempt trap.

6.1.3 Second Train Logic

Where there is more than one track, a second train can approach at any time. If there is an advanced preemption interconnection between the traffic signals and the railroad, the appearance of a second train can hold the traffic signals in preemption and have the gates rise momentarily, allowing vehicles to pull up onto the tracks. Where second train logic is employed, if a second train is detected on the outer approach, the gates shall remain down until after the second train passes. Second train logic may be employed where no traffic signals are present if circumstances warrant.

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7.0 HIGHWAY-RAIL GRADE CROSSING PROJECT IMPLEMENTATION

7.1 HIGHWAY-RAIL GRADE CROSSING DESIGN PROCESS

The process for the proper analysis and design of highway-rail grade crossing improvements involves several different engineering disciplines, as well as the highway agency, the SCRRA, and the CPUC in regulatory roles. A typical highway-rail grade crossing design considers motorist behavior, pedestrian behavior, civil design, railroad design, railroad signal design, and traffic engineering plus application of CPUC, FRA and MUTCD regulations and standards. This design process involves all engineers involved in the ultimate configuration of the crossing, from the onset of design. The process is outlined in Figure 3-2.

The design of the highway-rail grade crossing is a dynamic iterative process, with the design evolving as different levels of design are reached. The ultimate configuration of the highway-rail grade crossing may be significantly different from the initial concept.

Modifications of a highway-rail grade crossing must go through the CPUC approval process. Because of this, the lead Engineer should allow time in the design process for diagnostic reviews by the engineering team (see Section 7-3). At these diagnostic reviews, the ultimate scope of the project, and ultimately the design, shall be determined. These diagnostics are an important part of the design process, and provide the necessary input from stakeholders to determine the effectiveness of the proposed changes. The lead Engineer shall take note and record the results of the diagnostic meetings and attempt to incorporate the appropriate recommendations and changes into the design.

The design of the highway-rail grade crossing shall include the input received from the different departments within SCRRA. The overall functionality and effectiveness of a highway-rail grade crossing shall be determined by operational and maintenance needs as well as engineering design needs. The input from these departments early in the engineering process shall provide important information that shall affect the overall design of the crossing. Designs that do not give adequate attention to SCRRA inter-departmental input often fall short of meeting the overall goals of the project, and often require substantial rework in order to accommodate those needs. The lead Engineer shall include SCRRA as an active participant in the design process in order to ensure that the recommendations in this Manual and the input of the SCRRA are adequately addressed.

7.2 DESIGN GOALS

The purpose of, and need for, the modifications should be set forth at the start of design. This will form the basis for the overall design of the project, and set the ultimate goals for the improvements. The evolving diagnostic process will define changes in those ultimate goals, changes that shall ultimately decide the outcome of the final design.

The initial efforts in the design should include meetings and field surveys with SCRRA staff to determine other factors that could affect the construction of the proposed improvements. During the development of the overall scope of the improvements, the lead Engineer should know the extent of work that will be necessary to implement the improvements. For example, the addition of a lane shall require the widening of the

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overall crossing. It may be necessary to recommend a complete reconstruction of the highway-rail grade crossing to ensure that the ultimate construction does not create other impacts or maintenance concerns.

The overall schedule of the crossing construction should be compared with SCRRA maintenance plans in the area. During this comparison, a plan of construction can be incorporated into a regular maintenance cycle so as meet the operational needs of the railroad. This is especially important in areas where heavy rail traffic minimizes the opportunities to remove tracks from service in order to perform construction and maintenance.

7.3 DIAGNOSTICS

7.3.1 Introduction

To make improvements to a crossing, construct a new crossing, or close a crossing, a series of diagnostic reviews shall be performed. As shown in Figure 3-1, before commencement of design, a conceptual diagnostic site meeting shall be completed with the purpose of understanding the existing conditions of the crossing. After the 30% Design, but before the Pre-Final 90% designs can be approved, a second diagnostic site meeting shall be completed to predict how the proposed changes would affect and improve the crossing.

The second diagnostic meeting will have the benefit of having all of the site survey and investigation work done and much of the design completed. During the second diagnostic meeting, any significant changes from the assumptions or recommendations in the first diagnostic meeting and any proposed requests for waivers from the Manual should be discussed. After completion of the design and construction, a final diagnostic site meeting shall be completed to verify that the new improvements allow the highway-rail grade crossing to function as intended. Information from SCRRA, FRA, inventories, and accident summaries—as well as information from local highway traffic departments—can help to create a clearer picture of how a highway-rail grade crossing functions and what problems need to be addressed. The diagnostic processes use a simple survey procedure, utilizing individuals in various areas of expertise to analyze the crossing.

The diagnostic team consists of knowledgeable representatives of stakeholders in a highway-rail grade crossing. Using highway-rail grade crossing safety management principles, the team evaluates conditions at a highway-rail grade crossing to make determinations or recommendations concerning safety needs. At a minimum, this diagnostic team needs to include: representatives of the highway agency or authority with jurisdiction over the highway; the SCRRA; and the CPUC (reference: CA MUTCD Part 8). Other participants in the diagnostic team may include the BNSF or UPRR railroads, and representatives of SCRRA member agencies.

The diagnostic team needs to be interdisciplinary to ensure that all factors relating to the operational and physical characteristics of the highway-rail grade crossing are properly identified, analyzed, and mitigated as necessary. The team shall have the expertise to provide a thorough engineering analysis of the physical and operational aspects of the highway-rail grade crossing, and provide input into the overall effectiveness and safety of the proposed design of the crossing.

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Consultation with all stakeholders is required to ensure that the design of the highway-rail grade crossing shall, to the extent possible, comply with the recommended design practices and standards in this Manual.

In addition to the engineering expertise that should be included in the diagnostic, any stakeholder with an interest in the highway-rail grade crossing, or with information regarding the highway-rail grade crossing, should be included. The diagnostic team is responsible for bringing all factors affecting the design and ultimate operation of the highway-rail grade crossing into the discussion of the overall design.

7.3.2 Diagnostic Process

The diagnostic process necessary to begin and complete the design of the highway-rail grade crossing is a several-step process that is outlined in Figure 7-1. The diagnostic team should analyze the highway-rail grade crossing at various steps along the way to assess the progress of the overall design. Before starting the diagnostic process, the following should be addressed:

- Purpose of and need for improvements
- Existing conditions
- Existing deficiencies from the recommendations in the Manual
- Funding
- Lead agency
- Roles and responsibilities

Defining the purpose of, and need for, the improvements will set the stage for the overall diagnostic process. The engineering team, working on an established purpose and need, shall analyze the reasons for the proposed improvements and develop the overall strategy on the design of the improvements and the development of engineering solutions.

While funding is not a determining factor in developing the overall safety improvements at a crossing, it does affect the overall approach to the design, construction, and maintenance of the crossing. In many cases, the purpose of the modifications is directly related to funding sources and requirements that define the process. These responsibilities and funding sources for the project should be determined at the onset of the design process.

The roles and responsibilities of each organization represented at the diagnostic review shall be established prior to the commencement of the diagnostic process.

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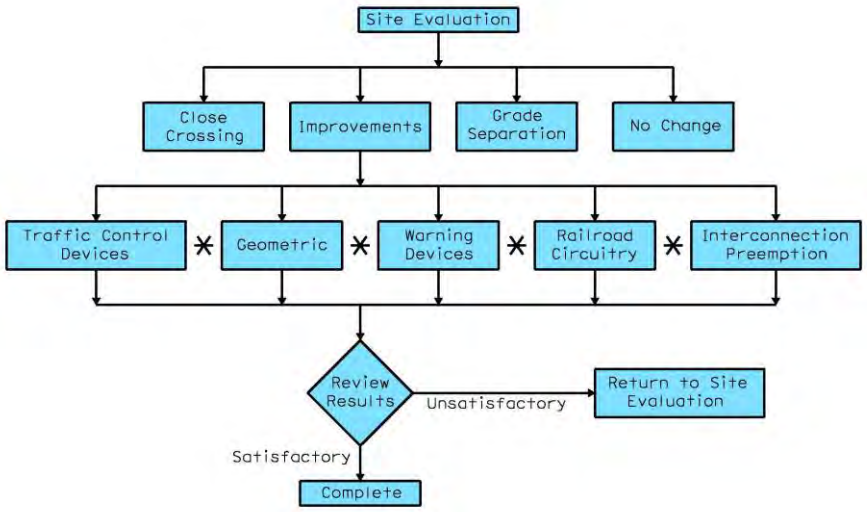

Figure 7-1. Diagnostic Meeting Process

Once the above-mentioned issues have been addressed, the team begins the diagnostic process in accordance with the above Figure. As shown, the first steps are deciding upon the first level: namely, whether the highway-rail grade crossing can be closed, or should be grade separated (usually this has been determined by the lead agency, or the project proponent, prior to commencing the diagnostic process); whether no changes should be made; or whether improvements are to be proposed. In general, the proposed improvements should bring the highway-grade rail crossing in compliance with the recommendations in the Manual. Once the team decides improvements are needed at the crossing, each of the elements (comprising the second level of the figure) is discussed, and improvements, if any, are proposed. Upon completion of the first diagnostic site meeting, the conceptual scope of the improvements is agreed upon between the stakeholders and the design phase of the project can begin.

In order to incorporate current conditions at an existing, or proposed, highway-rail grade crossing into the conceptual design of a highway-rail grade crossing, field observations are needed to record key factors that may affect the capabilities and success of the design. At this stage of the project general observations should be recorded, including but not limited to factors such as types of warning devices, vehicle and pedestrian conditions, vehicle-train and pedestrian-train conflict points, highway-rail grade crossing surface conditions, adjacent intersection and driveway conflicts, train speed, train density, train operating patterns, school bus volumes, location of schools in the vicinity, location of stations, illegal/risky vehicle and pedestrian maneuvers, sight distances, and pavement striping.

The next level of the figure, “review results”, represents the design diagnostic stage, and builds on the information gathered in the concept diagnostic by facilitating a more in-

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depth analysis, from which final design recommendations for highway-rail grade crossing betterment are achieved. This diagnostic occurs after design has begun, usually following the completion of the 90% Design but sometimes as early as the 65% Design, but only after unique information regarding the conditions at the highway-rail grade crossing has been determined. This information may include, but is not limited to, factors such as additional traffic behavior, utility information, drainage information, or other civil-related information that will affect the overall design and operation of the crossing.

At this stage in the design, additional detailed data regarding design vehicles, current preemption phasing, current intersection phasing, annual average daily traffic (AADT), train speeds, train types, number of trains per day, train detection type, and the percent of trucks using the highway-rail grade crossing may be necessary.

The design diagnostic gives the design team a foundation to proceed with their highway-rail grade crossing improvement design.

The post-construction diagnostic site meeting also is representative of the "review results" level of the diagnostic process figure, in that the project is not satisfactorily completed until this process is completed and all the stakeholders agree on the results of the improvements.

7.3.3 Diagnostic Form

The diagnostic form is used by the diagnostic team as a representative checklist of existing highway-rail grade crossing conditions, noticeable conflicts, necessary changes required, etc. Appendix D and D-1 show the SCRRA diagnostic form and instructions for its effective use. The diagnostic form is structured to allow users to easily gather pertinent information about the crossing. The form also accommodates extra notes and diagrams that help to clarify the current conditions at the crossing.

7.4 NEW HIGHWAY-RAIL GRADE CROSSINGS

Refer to Appendix H for SCRRA's Board adopted policy on new crossings. *Before considering a new highway-rail grade crossing, the first alternative that should always be considered is a grade-separated crossing. It is SCRRA's policy, as well as State and National policy, to discourage the construction of new at-grade highway-rail grade crossings.* However, there are instances where the additional highway-rail grade crossings are in the public's best interest, and where the construction of a grade separation is not feasible for a variety of reasons. In most cases, the construction of a new highway-rail grade crossing must be offset by the closure of one or more existing crossings.

A proposed new highway-rail grade crossing shall only be permitted if there is a clear public need, funding is sufficient, and the appropriate measures have been taken to mitigate the hazards associated with the new crossing. The CPUC will ultimately determine whether a new grade crossing is warranted; they should be contacted very early in the process to consider any new highway-rail grade crossing. A new highway-rail grade crossing must go through an environmental study (either a negative declaration, or environmental impact report), proper diagnostics, engineering, and a regulatory process for approval. Prior to beginning the planning for a new crossing, a Letter Agreement to reimburse the SCRRA for its review and participation in the

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conceptual planning process should be developed; if design is required, a Design Services Agreement with the SCRRA should be developed. The agency initiating the highway-rail grade crossing shall have in place a fully executed C&M Agreement with SCRRA before any construction begins. Refer to Section 2.5 for further information regarding Letter and Services Agreements, C&M Agreements, rights-of-entry, and right-of-way procedures related to the construction of new crossings or the modification of existing highway-rail grade crossings.

All costs related to the construction of the new crossing, including those borne by SCRRA for design or programming, shall be the responsibility of the initiating agency. When no highway-rail grade crossing closures are included in the project, the involved parties must agree on the assignment of responsibility for providing financing for ongoing maintenance of the highway-rail grade crossing surface and traffic control devices. Closing one or more adjacent crossings shall be considered whenever a new highway-rail grade crossing is initiated.

7.5 HIGHWAY-RAIL GRADE CROSSING ENHANCEMENTS

An existing highway-rail grade crossing may be modified through the engineering of improvements that enhance the overall safety and operation of the crossing. Enhancing the safety of a crossing will be best achieved by incorporating the recommended design practices and standards in this Manual.

7.6 HIGHWAY-RAIL GRADE CROSSING CLOSURE

Closure of a highway-rail grade crossing is accomplished by eliminating highway access to the crossing. Because a highway-rail grade crossing closure is a method of eliminating hazards at a highway-rail grade crossing, closures costs may qualify for funding through the Section 130 Program. Refer to Section 7.10.2 for additional information regarding the Section 130 Program. Closure of a highway-rail grade crossing shall always be considered as an alternative to the modification of an existing crossing.

Closure of an existing highway-rail grade crossing will typically require a public process, an environmental process, and “street vacation” to address the property rights.

A highway-rail grade crossing closure may be the result of a corridor highway-rail grade crossing consolidation project. In this case, several crossings may be consolidated into fewer crossings, thereby minimizing the relative hazards within the corridor.

7.7 SEALED CORRIDORS

The SCRRA Sealed Corridor Program is a comprehensive strategy to minimize access to the railroad corridor. Some examples of sealed corridor enhancements are as follows:

7.7.1 Sealed Corridor Safety Enhancements

- Exit gates
- Median separators and raised islands
- New signs and pavement markings
- Advanced highway-rail grade crossing signal analyzers

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- Locked right-of-way gates and fencing
- Highway-rail grade crossing geometry improvements
- Grade separation or closing of crossings
- Advanced traffic signal technology
- Advanced pedestrian treatments

Where applied at multiple crossings, a system of prioritization shall be adopted in order to equitably apply sealed corridor technology within the design.

7.8 QUIET ZONES

A "quiet zone" is an area that qualifies under the FRA final rule, "The Use of Locomotive Horns at Highway-rail grade crossings," on the use of locomotive horns at highway-rail grade crossings. This rule is intended to maintain public safety while responding to concerns of communities that have sought relief from unwanted train horn noise. Areas that may qualify for quiet zones are those in which the placement of traffic warning devices has been approved as providing enough safety protection so that sounding of a locomotive horn is unnecessary. A quiet zone is created upon notification of establishment by the requesting agency, usually the local municipality. The process of creating and authorizing a quiet zone is defined in CFR 49 Part 222.43. The FRA shall determine that a quiet zone exists after they have reviewed, qualified, and approved the highway-rail grade crossing improvements. Local public authorities are the only entities that can designate or apply for quiet zone status. *The highway agency who owns the highway shall also bear the initial and recurring costs if SCRRA is required to install and maintain additional equipment.* SCRRA has adopted procedures for the pursuit of a quiet zone within the SCRRA system. Also, additional information regarding the creation of quiet zones can be found on the FRA website at http://www.fra.dot.gov.

Outside quiet zones, locomotives must sound their horns 15-20 seconds prior to entering the highway-rail grade crossing, but not if the train is more than a quarter-mile away from the crossing. Most state laws and railroad rules require that locomotives sound their horn a quarter-mile prior to entering the crossing, and continue until the highway-rail grade crossing is occupied by the locomotive.

7.9 SUBMITTALS

7.9.1 Engineering Drawings and Specifications

The lead Engineer shall submit to SCRRA project plans, specifications, and estimates at each submittal stage, in accordance with SCRRA Engineering Standards. The approved size for documents shall be 11" × 17" scaled for contract drawings, originally submitted plans for shop drawings, high-resolution color electronic files on read-only compact discs, and for photographs; all other documents should be 8½" × 11".

7.9.2 Traffic Preemption Calculations and Drawings

Traffic signal design, drawings, installation procedures, preemption timing calculations, and preemption sequences shall be signed and stamped by a registered professional Engineer (civil or traffic) licensed to practice in the State of California. The design drawings shall show intersection plan and details, phase diagrams, signal standard

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schedules, conductor schedules, estimated material, and construction notes, as per Caltrans's standard drawing format. The highway agency shall also complete and submit the following:

- The completed "LADOT Railroad Preemption Worksheet" (see Appendix E) showing calculations for each approach to the crossing.
- A study of the variation in total warning time and advance preemption time as a result of railroad operations and variation in traffic signal operation. Both the "worst case" (maximum right-of-way transfer time) scenario and the "best case" (minimum right-of-way transfer time) scenario shall be considered for the determination of the maximum highway traffic signal preemption time and the design of preemption sequences.

If advance preemption is designed, a design, signed and stamped by a registered professional Engineer (civil or traffic) licensed to practice in the State of California, shall be submitted to SCRRA for review and approval.

7.9.3 Design Phase

The highway agency shall submit Preliminary Design (30% Design), Interim Design (60% Design), 90% Design, and Final Design (100% Design) documents to SCRRA.

Five (5) 11"x17" sets of plans and specifications shall be submitted to SCRRA during the design phase. Four weeks will be allowed for each review. If a consultant is used for the review process, the consultant and the lead Engineer shall be free to communicate and resolve all design issues.

Any deviations or design exception from this Manual shall be considered by the SCRRA through the submittal of a Design Exception Form, attached as Appendix F.

7.9.4 Construction Phase

For any project that infringes on SCRRA or member agency property, the initiating agency shall submit two sets of drawings showing details of construction affecting the tracks and property; specifications; and plans and procedures for excavation, demolition, falsework, sheeting and shoring, drainage, and temporary traffic control.

7.9.5 As-Built Phase

The highway agency shall submit five (5) hardcopy sets, and one (1) electronic set using MicroStation CAD software, of As-Built documents to SCRRA at the completion of the project, and prior to closing of the project.

7.10 FUNDING

7.10.1 Introduction

Any party that is interested in creating or modifying a highway-rail grade crossing may be responsible for financing of the highway-rail grade crossing enhancements. However, financing can be funded by the Federal Aid At-Grade Highway-Rail Grade Crossing Program (Section 130 Program). Some funding for grade separations is available under

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Section 190. Additional funding may be available through other state or federal programs.

7.10.2 Section 130

Section 130 of the United State Code, Title 23 (23 U.S.C. 130), provides federal funds for the elimination of hazards at existing highway-rail grade crossings. The purpose of the Section 130 Program is to reduce the number, severity, and potential of hazards to motorists, bicyclists, and pedestrians at highway-rail grade crossings. This program is a cooperative effort between the FHWA, Caltrans, the CPUC, railroad companies, and highway agencies. Additional information can be found on the FRA website at http://www.fra.dot.gov.

In order to authorize the highway-rail grade crossing under the Section 130 Program, the highway-rail grade crossing must go through a series of diagnostic reviews initiated by the railroad (in association with the highway agency, CPUC, and Caltrans), and be eligible to receive funding. Not all highway-rail grade crossings are eligible to be financed by the Section 130 Program. Highway-rail grade crossings that are not eligible for the Section 130 Program are as follows:

- Pedestrian-rail grade crossings solely for the use of pedestrians or bicyclists, including station crossings
- Highway-rail grade crossings used by light rail vehicles, either solely, or in conjunction with freight operation
- Private highway-rail grade crossings
- Existing grade-separated crossings

The submittal of a highway-rail grade crossing for Section 130 funding shall include the documented record of a thorough diagnostic process. This is accomplished at the concept level of engineering for programming into the system. It is important to consider the timeline associated with the programming of Section 130 associated modifications. The normal programming of Section 130 funding occurs several years in advance of construction. Because of this, it is important to allow for this time within the implementation schedule for the proposed enhancements.

In order to be properly considered for Section 130 funding, a complete engineering analysis of the highway-rail grade crossing is required. As part of this analysis, a hazard analysis is necessary to properly determine the level of highway-rail grade crossing improvements to be installed under the plan. Further work involves prioritization of the funding request with requests from other crossings throughout California. During the early stages of the project, it is important for the involved parties to consider the sources of funding and the requirements associated with that funding. In addition, the purpose and need of the proposed improvements should be considered for eligibility under the Section 130 Program.

7.10.3 Section 190

The State of California has instituted the Section 190 Program to provide funding to highway agencies to separate public highway-rail grade crossings, eliminate existing highway-rail grade crossings, or provide funds to highway agencies to grade separate

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existing crossings. This funding is based upon a priority list developed by analyzing the hazards related to the crossing. Factors such as traffic demands and accident history play a large role in this prioritization. When the entire cost of the grade separation is considered, this funding may be a small percentage of the construction costs for the project.

This program is administered by the CPUC and Caltrans. Additional information can be found on the CPUC website at http://www.cpuc.ca.gov.

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8.0 SPECIAL ISSUES

8.1 ADJACENT FREIGHT OR TRANSIT TRACKS

The location of adjacent track(s) owned and operated by another railroad company or transit agency creates conditions that need to be evaluated during the design of warning devices for vehicles and pedestrians. It is currently beyond the scope of the Manual.

8.2 ADJACENT DEVELOPMENT

Redevelopment and new developments have afforded the opportunity to control the location of driveway approaches that are close to the highway-rail grade crossing (see Section 3.7). The SCRRA Engineer shall review the development plans, coordinate with the highway agency, and ask the agency to impose "conditions for development approval" relative to development street access.

Adjacent residential and commercial development to highway-rail grade crossings may substantially increase the volume of highway traffic over a crossing. This may occur during certain times of day, such as during peak rush hour periods, or during certain times of the year. Schools near highway-rail grade crossings may generate increased volumes of vehicular and pedestrian traffic before and after school hours. Likewise, certain entertainment/sporting venues may increase vehicular and pedestrian traffic before, and after, an event. Observations of a highway-rail grade crossing during different times of the day and year should take place to understand how the dynamics of adjacent development affect a highway-rail grade crossing. The selection of appropriate traffic control/warning devices shall be installed to mitigate these affects.

8.3 LIGHT RAIL TRANSIT

Currently, the SCRRA System does not include any Light Rail Transit (LRT) systems that share the rail corridor with SCRRA trains. This section of the Manual may be updated in the event of introduction of an LRT system(s).Light Rail Transit (LRT) systems are becoming more prevalent in urban areas. The Gold Line Foothill LRT is proposing to share the existing SCRRA's Pasadena subdivision from Azusa to Montclair in a common shared corridor that would potentially include over 25 shared grade crossings. LRT systems operate very differently from other commuter and freight rail systems; therefore, the close proximity of these systems warrants special attention. When considering shared corridors and grade crossings, the designer shall become thoroughly familiar with the July 10, 2000 joint FRA/FTA statement addressing the General System and Rail Transit Common Corridor Safety Program and the FRA 2008 PowerPoint presentation by Ed Pritchard of FRA on the same subject. The link is as follows: http://www.techtransfer.berkeley.edu/railroad08downloads/pritchard.pdf.

LRT crossings adjacent to SCRRA crossings shall be addressed individually from the beginning of the project. **LRT (Light Rail Transit) tracks located adjacent to SCRRA highway-rail and pedestrian-rail grade crossings shall be analyzed as a joint system. If the combined number of SCRRA and LRT tracks exceeds three (3), a grade separation shall be constructed.** Refer to Section 3.13 for additional information on adjacent highway-rail grade crossings.

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The nature of LRT operations places stations in closer proximity to each other than commuter rail operations. As such, an LRT vehicle may be stopped at a station while commuter operations continue pass by. The lead Engineer shall analyze crossings where LRT and SCRRA operations are closely related yet mutually exclusive.

8.4 LANDSCAPING

It is important that landscaping not decrease the level of safety at a highway-rail grade crossing by impeding the visibility of any active or passive warning signals or signage by motorists, pedestrians, or railroad engineer.

SCRRA has developed Landscaping Design Guidelines to provide uniform and consistent standards for landscaping during design, construction, and maintenance on commuter and freight railroad rights-of-way. SCRRA staff worked together with the member agencies' staff in preparing and finalizing these guidelines. These proposed guidelines are intended to provide minimum standards and general requirements for the design, construction, and maintenance of landscaping in a manner compatible with safe operation of railroad corridors and with the rail capacity expansions envisioned.

As mentioned previously in the Manual, in general, within 100 feet of the crossing, stamped concrete or other hardscape materials, infill for median islands is the standard landscape treatment for median islands.

8.5 BIKEWAYS AND TRAILS

The addition of bikeways and trails within, or adjacent to, the railroad right-of-way presents a challenge to both the highway agency and railroad operators. (See Figure 8-1 for an example of a bikeway adjacent to active railroad tracks). Of particular concern to SCRRA is the activity of pedestrians and bicyclists within the right-of-way. Also, the incorporation of a bike path that is adjacent to the highway-rail grade crossing intersection introduces another element to be accounted for within the analysis and determination of preemption requirements for the highway-rail grade crossing. Refer to Section 6.0, Railroad Signal Interconnect, for provisions governing the design of the interconnection of the traffic signal system with the railroad signal system. SCRRA has developed "Rail with Trail Design Guidelines" that shall be referred to whenever a bikeway is to be constructed within railroad right-of-way. The highway agency shall follow this procedure in the development of the trail, including improvements to site within and adjacent to the railroad right of way, and may include the installation of additional fencing and channelization, modified traffic signals, pedestrian treatments, and additional highway-rail grade crossing warning devices. The initiating agency shall facilitate a diagnostic review and highway-rail grade crossing design process to mitigate these effects.

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Figure 8-2. Bikeway and Trail Separation

8.6 FENCING AND SECURITY GATES

It is SCRRA's desire to keep trespassers out of the operating railroad corridor. The design of the travelway shall incorporate adequate fencing to limit access by trespassers onto SCRRA railroad tracks. This fence shall be tubular steel fencing or welded wire mesh fencing as per SCRRA Engineering Standards. The fence shall be located at the edge of the trail, as defined by the appropriate agreement.

A three rail split-rail fence, in combination with landscaping that can serve as a positive barrier between the track and the trail, may be used in rural or environmentally- sensitive areas, if approved by SCRRA and the member agency. Since newly planted landscaping may take a few years before it becomes an effective barrier, suitable temporary measures may be required until the landscaping has sufficiently matured. Any landscaping must be maintained so it does not impede the visibility of any active or passive warning devices—or signage—by trains, pedestrians or engineers.

It is the policy of SCRRA to maintain access along its right-of-way for maintenance and inspection. The travelway fencing shall not be constructed so as to limit this access. Should access points be necessary, the fencing shall incorporate gates at locations as per SCRRA Engineering Standards. These gates shall be secured with SCRRA locks. The highway agency shall install "No Trespassing" warning signs, as per SCRRA Engineering Standard.

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The height of the fence within 150 feet of highway-rail grade crossings shall be four (4) feet. The height of the fence in the balance of the right-of-way shall be at least six (6) feet.

All access points to SCRRA rights-of-way at highway-rail grade crossings shall utilize a right-of-way fence in accordance with SCRRA Engineering Standards. These gates are to be installed in accordance with the instructions shown on these drawings, in particular as follows:

- The gate shall be placed to allow a maintenance vehicle to park prior to opening the gate.
- Gate shall swing away from the tracks.
- The installation of the gate shall be incorporated into the proposed fencing plan to adequately secure the rights-of-way.
- Bollards, K-Rails, or other substantial barriers shall be used with the right-of-way gates to provide a maximum level of security.

8.7 LIGHTING

The highway agency shall provide lighting for the travelway to maintain a safe environment for the users. Local, state, and federal guidelines, as well as industry standards for lighting, shall be incorporated into the design.

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9.0 CONSTRUCTION

9.1 GENERAL

As mentioned previously, construction cannot begin until a C&M Agreement and a SCRRA Form No. 6 (Temporary Right-of-Entry Agreement) have been executed by SCRRA, and workers have completed railroad safety training. The construction shall meet requirements stated in SCRRA's Standard Specifications, guidelines, and Engineering Standards. It shall also meet applicable AREMA requirements.

Any damage to rails, ties, structures, embankments, third-party property, signal and communications equipment, or any other facility shall be repaired, at the highway agency's or its contractor's expense, to a condition equal to or better than the condition prior to entry (and to a level accepted by SCRRA). The highway agency or its contractor agrees to reimburse SCRRA, and any affected operating railroads, for any and all costs and expenses incurred as a result of their work, which may result in the following:

- Unscheduled delay to the trains, or interference in any manner with the operation of trains
- Unscheduled disruption to normal train operation
- Unreasonable inconvenience to the public or private users of the system
- Loss of revenue
- Alternative method of transportation for passengers

The **highway agency and its contractors shall comply with the rules and regulations contained in the current editions of the SCRRA documents (listed below) during construction of the project.** These SCRRA forms are available on SCRRA's website:

- Temporary Right-of-Entry Agreement (SCRRA Form 6).
- Rules and Requirements for Construction on Railroad Property (SCRRA Form 37).
- General Safety Regulations for Construction/Maintenance Activity on Railway Property.
- Applicable SCRRA Engineering Standards.

The highway agency shall notify SCRRA 30 working days prior to beginning work on the right-of-way, and secure any protection SCRRA deems necessary. The highway agency shall be responsible for reimbursing SCRRA the actual costs and expenses incurred by SCRRA for all services and work performed in connection with the highway-rail grade crossing project, including a computed surcharge representing SCRRA's costs for administration and management.

The latest version of SCRRA Standard Specifications for work within rights-of-way operated and maintained by SCRRA shall be included within the contract documents. The list of these specifications is shown in Appendix I in these standards, and the latest electronic version of these specifications is available from SCRRA's Engineering Department upon request.

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9.2 EXCAVATION AND BACKFILL

The excavation and backfill shall meet all the requirements shown in SCRRA Standard Specification 02300, Earthwork. Excavation for construction of footings, piers, columns, walls, or other facilities that require shoring to support active tracks shall comply with AREMA requirements and standard specifications. The contractor shall perform excavation and grading so that the finished surfaces are in uniform planes, with no abrupt breaks in surface, and have positive drainage on the right-of-way away from the track structure.

9.3 EROSION CONTROL

The general plans for the bridge shall indicate the proposed methods of erosion control, and must specifically address means to prevent silt accumulation in ditches and culverts and prevent fouling the track ballast, sub-ballast, and existing drainage systems. Existing track ditches shall be maintained at all times throughout the construction period. After construction has been completed, all erosion control devices and all deposits of silt shall be removed, and affected ditches restored. Approval of the erosion control plan does not relieve the submitting agency, consultant, or contractor of the ultimate responsibility and liability for a satisfactory erosion control plan.

9.4 TEMPORARY TRAFFIC CONTROL

SCRRA's "Temporary Traffic Control Guidelines for Highway-Rail Grade Crossings" shall be referenced for further information on definitions, referenced standards, traffic control plans, submittals, traffic control elements, and responsibility/authority for temporary traffic control at highway-rail grade crossings. The guidelines provide acceptable alternatives and procedures to prescribe appropriate temporary traffic control measures at highway-rail grade crossings.

The construction of a new highway-rail grade crossing, or the modification of an existing crossing, shall require temporary traffic control. A temporary traffic control plan, including traffic detours, shall be prepared in accordance with Part 6 of the CA MUTCD, the WATCH Manual, and the local highway agency's requirements. **When a highway-rail grade crossing exists either within, or in the vicinity of, a temporary traffic control zone, lane restrictions, flagging, or other operations shall not be performed in a manner that would cause vehicles to stop on the railroad tracks unless a law enforcement officer or qualified flagger is provided at the highway-rail grade crossing to minimize the possibility of vehicles stopping on the tracks.** This applies even if automatic warning devices are in place.

SCRRA shall be contacted when the initial planning begins for any temporary traffic control zone that may, directly or indirectly, influence the flow of traffic over highway-rail grade crossings. Responsible agencies (along with others affected, such as emergency services and businesses) should meet to plan appropriate traffic detours and the necessary signing, marking, and flagging requirements for operations during temporary traffic control activities. Consideration should be given to: the length of time the highway-rail grade crossing will be closed; highway classification; type of vehicle and traffic affected; the time of day; and the materials and techniques of repair. Temporary traffic control operations should minimize the inconvenience, delay, and crash potential related

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to affected traffic. Temporary traffic control activities should not be permitted to extensively prolong the closing of a crossing.

Temporary traffic control shall be used when a maintenance or construction activity is located on the railroad right-of-way, or when activity in the vicinity of a highway-rail grade crossing could result in queuing of vehicles across the railroad tracks. The issue of temporary traffic control shall be addressed within the specifications for the crossing.

9.5 UTILITY ADJUSTMENTS

The existing utilities shall be located prior to commencing any excavations. *Approval of the project by SCRRA does not constitute a representation as to the accuracy or completeness of location or the existence or non-existence of any utilities or structures within the limits of this project.* The appropriate regional notification center [Underground Service Alert (DIGALERT) at (800) 227-2600], railway companies, and utility companies shall be notified prior to performing any excavation close to any underground pipeline, conduit, duct, wire, or other structure. Refer to SCRRA's website www.metrolinktrains.com to ensure proper contracts and phone numbers. SCRRA is not a member of DIGALERT; it is, therefore, necessary to call SCRRA's signal department phone number (refer to SCRRA's website) to mark, at highway agency's or contractor's expense, signal and communication cables and conduits. In case of signal emergencies or highway-rail grade crossing problems, the contractor shall call SCRRA's 24-hour signal emergency number. If utilities cannot be located, potholing shall be done to locate the utilities. SCRRA and appropriate utility owners shall be notified immediately when utility lines not known or indicated on the drawings are encountered. No service shall be disrupted until the utility owner and SCRRA have determined the required action on such lines.

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10.0 OPERATION AND MAINTENANCE

The design and operation of a highway-rail grade crossing requires the coordination of maintenance between the agency and SCRRA, as defined in the C&M Agreement. The complexity of this interaction increases when traffic signals and preemption are incorporated into the crossing design. In cases when the efficient operation of the traffic signals and other highway agency-controlled devices provide an important element in the overall safety of the crossing, the following procedures should be used.

10.1 HIGHWAY AGENCY INSPECTIONS

The highway agency shall independently inspect the preempted traffic signals intersection a minimum of every three (3) months, and shall report the results of this inspection to SCRRA. A general review of the highway intersection and highway-rail grade crossing for proper signing, pavement marking, sight distances, vegetation, visibility and changes in conditions should be made. Independent inspection and testing should include at least the following:

- Ensure the timing design parameters are recorded
- Simulate the preemption signal input from the highway-rail grade crossing warning system while confirming the railroad interconnect is connected to the highest priority control unit input
- Confirm preemption activation of traffic signals, including any associated pre-signals or active signs, and confirm that the devices are operating as designed
- Confirm that the standby battery power operates as designed
- Ensure all warning labels are clearly visible and legible
- Ensure all advance warning signals and signs are clearly visible, and that any trimming of vegetation or trees is done as necessary

10.2 JOINT INSPECTIONS

Highway-rail grade crossings with preempted traffic signals shall be jointly inspected on a semi-annual basis. SCRRA shall be contacted prior to each inspection to coordinate and schedule the work, and SCRRA's representative shall be present during each inspection. The inspection should be conducted while a train passes through the crossing, if possible. During joint inspections, a general review of the highway intersection and highway-rail grade crossing for proper signing, pavement marking, sight distances, and changes in conditions, should be made. Joint inspection and testing should include at least the following:

- Confirm timing design parameters, including maximum preemption time and gate lowering times
- Confirm interconnection circuit wires are free of grounds or foreign currents, and that the system fails in a safe mode
- Confirm the preemption signal from SCRRA is connected to the highest priority preemption input
- Identify whether special features are included, and functioning as designed
- Activate the highway-rail grade crossing warning system and confirm that preemption activation of traffic signals responds during all phases of the traffic controller unit

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- Confirm that the pedestrian clear-out time matches the design timing
- Record the joint inspection and test date, as well as the next due date

10.3 HIGHWAY-RAIL GRADE CROSSING CONDITION CHANGES

Any changes to railroad or highway traffic conditions discovered during routine inspection and tests shall be reported to each party. The relevance of these observed changes may trigger an engineering safety evaluation of the site. The following are examples of reportable changes at the preempted site:

- Changes to railroad operation or speed
- Changes to vehicle traffic or speed
- Changes to the preemption or related signal settings
- Spotting of vehicles queuing onto the highway-rail grade crossing area
- Vehicles having difficulty stopping safely when a train approaches and activates the warning system

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From: Maya Son <mayason2@gmail.com>
Sent: Sunday, May 21, 2023 8:36 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Query re: traffic

Dear Santa Clarita Planning Commission,

I am writing to inquire about what will be done to mitigate the traffic in the area once the studio is built.

Sincerely,

Maya Son
21550 Cleardale Street
Newhall CA 91322

Best,

MS

Sent from my iPhone
Please excuse brevity and typos.

From: Robby Kennedy <robby@kenncoplumbing.com>
Sent: Monday, May 22, 2023 1:51 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Proposed Shadowbox Studios Project (Master Case 21-109)

Dear Santa Clarita Planning Commission,

I am writing to you today to urge you to reconsider the enormity of the proposed Shadowbox Studios. This project, at its present proposed size does not fit into our mostly residential community. Here are a few of my thoughts:

- The size and quantity of buildings is too much. Buildings fifty-five feet tall in an area that doesn't have any buildings even close in height is out of place. Please do not allow this! Twenty five to thirty feet in height should be the maximum.
- Traffic. Why should all traffic funnel to only the South of this huge project. Seems like there should be another exit to the north along the Metropolitan Water District Right-of-Way. When the Bermite property is developed in the future, Via Princessa and Wiley Canyon Rd. will connect with Highway 14 which would help with freeway access heading northeast towards Palmdale. Also, any traffic heading north or northwest via Railroad Ave. would benefit from that access as well. If the 13th street crossing was blocked by a train, access could be obtained using the same egress.
- Hours of operation. Having large trucks moving around and parking all hours of the night along the backside of Alderbrook is not fair to those people that reside along that street. Workers typically are not quite and it would be a shame if the hours of operations isn't addressed.
- The majority, not all, but the majority of people that spoke in favor of this project were people from out of the area and businesses that will profit from this project. The majority of residence in the canyon that I have spoken to are not totally against the project, they are just against the size of it as well as the traffic.

I really hope the City of Santa Clarita will do the right thing and downscale this project or move it to an industrial location.

Sincerely,
Robert Kennedy, Jr.
21366 Placerita Canyon Road
Newhall, CA 91321

Lisa Howe

From: Erika Iverson
Sent: Monday, May 22, 2023 2:03 PM
To: Lisa Howe
Subject: FW: Proposed Shadowbox Studios Project (Master Case 21-109)

From: Robby Kennedy <robby@kenncoplumbing.com>
Sent: Monday, May 22, 2023 1:51 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Proposed Shadowbox Studios Project (Master Case 21-109)

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Dear Santa Clarita Planning Commission,

I am writing to you today to urge you to reconsider the enormity of the proposed Shadowbox Studios. This project, at its present proposed size does not fit into our mostly residential community. Here are a few of my thoughts:

- The size and quantity of buildings is too much. Buildings fifty-five feet tall in an area that doesn't have any buildings even close in height is out of place. Please do not allow this! Twenty five to thirty feet in height should be the maximum.
- Traffic. Why should all traffic funnel to only the South of this huge project. Seems like there should be another exit to the north along the Metropolitan Water District Right-of-Way. When the Bermite property is developed in the future, Via Princessa and Wiley Canyon Rd. will connect with Highway 14 which would help with freeway access heading northeast towards Palmdale. Also, any traffic heading north or northwest via Railroad Ave. would benefit from that access as well. If the 13th street crossing was blocked by a train, access could be obtained using the same egress.
- Hours of operation. Having large trucks moving around and parking all hours of the night along the backside of Alderbrook is not fair to those people that reside along that street. Workers typically are not quite and it would be a shame if the hours of operations isn't addressed.
- The majority, not all, but the majority of people that spoke in favor of this project were people from out of the area and businesses that will profit from this project. The majority of residence in the canyon that I have spoken to are not totally against the project, they are just against the size of it as well as the traffic.

I really hope the City of Santa Clarita will do the right thing and downscale this project or move it to an industrial location.

Sincerely,
Robert Kennedy, Jr.
21366 Placerita Canyon Road

Newhall, CA 91321

From: Barb Kennedy <barb@kenncoplumbing.com>
Sent: Monday, May 22, 2023 2:27 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Proposed Shadowbox Studios Project (Master Case 21-109)

Dear Santa Clarita Planning Commission,

I am writing to you today to urge you to reconsider the enormity of the proposed Shadowbox Studios. This project, at its present proposed size does not fit into our mostly rural/residential community. Here are a few of my thoughts:

- **The size and quantity of buildings is too much**. Buildings fifty-five feet tall in a residential area that doesn't have any buildings even close in height is out of place.
- **Traffic**. This also is too much for a rural/residential neighborhood. With The Master's University, three churches, and four hundred residential houses in the rural/residential neighborhood this seems like a traffic problem right from the start. Also Dockweiler was not constructed to accommodate large trucks and trailers and doesn't have a straight shot to the freeway so again another traffic problem on Sierra Highway. Is the city going to build a parking structure for all the cars that park on Dockweiler?
- **Hours of operation**. Again this is mostly a rural/residential neighborhood. Having large trucks moving around and parking all hours of the night along the backside of Alderbrook is not fair to those people that reside along that street. We have already experienced Melody Ranch and their moving trucks and trailers at all hours of the night in a residential neighborhood. Being in the construction industry we have working hours that we have to comply with. Don't see that in the movie industry.
  Please think about the resident in Placerita Cyn & the people on Dockweiler.
- **The majority of residence** in the canyon that I have spoken to are not totally against the project, they are just against **the size of it as well as the traffic**.

I really hope the City of Santa Clarita will do the right thing and downscale this project or move it to an industrial location.

Sincerely,
Barbara Kennedy
21366 Placerita Canyon Road
Newhall, CA 91321

From: Tracey Bruckner <traceybruckner@yahoo.com>
Sent: Monday, May 22, 2023 3:36 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Shadowbox Studios

I had planned on writing to you today anyway. Funny, this is exactly what I was writing to you about. Today while trying to leave my home for an appointment, the rail crossing was malfunctioning and stuck in the down position. Traffic was backed up almost to masters college I'm told. With no other choice, cars began going around the crossing gates. Regardless of the planned road expansion, having one exit from the Placerita canyon with the addition of Shadowbox studios prior to the Dockweiler extension seems ludicrous.

I personally am in favor of the project, I realize the economic benefits, however without an additional exit from the studio property I would ask you to reduce the size of the proposed project. A private rail crossing at 15th St, would provide an easy exit for studio vehicles without causing potential gridlock.

Our neighborhood is obviously significantly impacted by this development. No longer will we be welcomed home by the sight of open land and rolling hills, but rather large structures and parking lots. In exchange I propose that the 4-5 billboards along railroad Ave between Lyons and 13th are purchased and taken down. I never understood how the city could spend so much on the beautiful library building, only to have a view of a Big Mac billboard right across from it.

I am interested to hear your reply as quite honestly I'm not sure the planning commission really cares about how we feel. I'm hoping we can reach an agreement especially on the ingress and egress issue and work together with Shadowbox to develop something we can all live with
Sincerely,
Tracey Bruckner
661-755-9878

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Monday, May 22, 2023 6:22 PM
To: Lisa Howe
Subject: FW: Stusio Project 21-109 Heritage Oak destruction

From: karen towles <kdbtowles@gmail.com>
Sent: Monday, May 22, 2023 4:43 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>; rberlin@santa-clarita.com; tburnhart@santa-clarita.com; payala@santa-clarita.com; leichman@santa-clarita.com; dostrom@santa-clarita.com; karen towles <kdbtowles@gmail.com>
Subject: Stusio Project 21-109 Heritage Oak destruction

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Planning Commissioners,

Please ask the developer to change the plan to save the heritage oak and other oaks on this property. I know that we are all trying to preserve the character of Old Towne Newhall. The heritage oak can never be replaced. We are a proud tree city and the oaks are the longest growing tree in our community. Please preserve them in this development and other developments proposed in the future.

King regards,

Karen Towles

From:	Joe Morelli
To:	Erika Iverson
Subject:	Master case 21-109 City of Santa Clarita Planning Commission for the Hearing on Shadowbox studio project.
Date:	Thursday, April 6, 2023 11:56:10 PM

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Dear Ms.Iverson:

My name is Joe Morelli. I'm a resident here in Placerita Canyon.
I have a questions and concerns for the city about this project.

Jeff Weber purchased this property but did not do his due diligence. On December 10th, 2020 there was a One-Stop 20-016 requesting proposal for a movie studio facility. Which the city found many key issues wrong with the project. That require a General Plan Amendment along with General Plan and Zoning Ordinance Amendments and Minor Use Permits and other things.

The project doesn't fit the Placerita Canyon Special Standards District to protect, maintain and preserve and enhance and secluded, historical rural equestrian character of a community. Additionally, it is the purpose of these special standards to ensure that new and expanding structures are compatible with a characteristics of surrounding single-family residential neighborhood....
per section 17.39.020(A)

These are just some of the cities key issues with the project and why it's wrong with this sight that the City pointed out.

Also with Mixed Use guide per the City to preserve the character of existing neighborhood and protected from adverse impacts to the residents. So how does this project improve Placerita Canyon historic rural equestrian community.... It does not..

There's no 55 foot tall building's in the whole Newhall area and definitely not 20 of them on 65 usable acres. Parking for almost 3000 and 257 trailers.
There's not a dozen 55 ft tall buildings in the whole of Santa Clarita. So why does Placerita Canyon need 20 of them all in one small area.
This project is larger than a Santa Clarita Mall in both size and height. At least the mall has four major streets and multiple exits all around it.

Again, Jeff Weber did not do his due diligence when he purchased the property and is now trying to make it fit into this area after the City has already told him it doesn't belong here.

So I'm asking the City of Santa Clarita Planning Commission not to make General Plan Amendments, Zoning Changes and Minor Use Permits to make this project fit our area.

This project doesn't belong here and that's it. So why make it fit.... For the better of who the residents or just money.

I'm all for jobs and there's a better place for this project and size. The Whitaker-Bermite property Golden Valley and Centerpointe all concrete tilt-ups and no residential around.

Golden Valley 4 Lane major road straight shot to the 14 highway.
Not a D rated crossing at 13th street and Railroad.The traffic study is a D rating before and is a D rating after the project. So where's their any improvements a D is a D but with new shiny lights. Infact 4 traffic lights in a 1/4 mile. How does traffic lights fit into Placerita Canyon community or standards... not at all.

Please don't make this project fit Placerita Canyon by rezoning and planning changes.

Thanks, Joe Morelli born and raised here in the SCV and a resident of Placerita Canyon that is going to be affected by this project.

I remember as a child going to Tumble In getting a root beer slushy then going to the summer carnival that would be in the open space and seeing the cows in the dairy down the road... many many years ago...

KANOWSKY & ASSOCIATES
ATTORNEYS AND COUNSELORS OF LAW

Carl J. Kanowsky, A Professional Corporation
Roger Doumanian, A.P.C., Of Counsel

26481 Summit Circle
Santa Clarita, CA 91350
Phone: (661) 290-2656
Fax: (661) 290-2697
www.kanowskylaw.com
cjk@kanowskylaw.com
roger@kanowskylaw.com

April 7, 2023

VIA U. S. MAIL and EMAIL

Ms. Erica Iverson
City of Santa Clarita
23920 Valencia Blvd.
Valencia, CA 91355

RE: Planning Commission Hearing on Shadowbox Studios Project
MASTER CASE NO.: 21-109

Dear Ms. Iverson:

As you know, this office represents the Placerita Canyon Property Owners Association ("PCPOA"). Enclosed with this letter are two previous letters that we have sent to the City concerning the Shadowbox (formerly, Blackhall) project.

Those letters outlined many of the concerns PCPOA has regarding Shadowbox. Placerita Canyon is a quiet, residential community governed by a Special Standards District. The purpose of this Special Standards District is outlined in the Municipal Code.

Adopted in June 2013, Santa Clarita Municipal Code section 17.39.020 states, "The purpose of the Placerita Canyon special standards district (PCSSD) is to protect, maintain, preserve and enhance the secluded, rural equestrian character of the community, to enhance the community's unique appeal and to help mitigate the cumulative impacts of residential development. Additionally, it is the purpose of these special standards to ensure that new and expanded structures are compatible with the characteristics of surrounding single-family residential neighborhoods, and protect the light, air, and privacy of existing single-family residences from negative impacts. These standards are also intended to ensure reasonable access to public riding and hiking trails, and to minimize the need for installation of infrastructure such as sewers, street lights, concrete sidewalks and concrete flood control systems that would alter the community's character, while providing for adequate drainage and other community safety features."

Since Shadowbox has opted to place its development in a neighborhood with these unique characteristics, it should have anticipated its proposal must satisfy these guidelines. PCPOA's prior correspondence with the City details how it appears that Shadowbox fails to accomplish this.

The letters also discuss areas of concern outside of the PCSSD, with traffic being a major issue.

PCPOA is concerned about this Project because 1) it fails to meet PCSSD standards; 2) it requires many changes to both the Placerita neighborhood as well as the City itself in needing a General Plan Amendment and a Zone Change (If the Shadowbox project was acceptable for this area, then why does it need the numerous changes to make it fit?); 3) it changes physical aspects of Placerita as it needs permissions to both alter the ridgeline as well as develop surrounding hillsides; and 4) it appears to run counter to other already existing, funded, and approved projects, such as the extension of Dockweiler.

The Dockweiler extension is moving forward. Representatives from the City are meeting with residents and business owners who will be impacted by the extension to, among other things, work out an agreement with those people about compensation for the losses they will suffer under that project. Part of those discussions has been the planned Traffic Circle or Roundabout at the junction of 12th Street and the extended Dockweiler. However, the Shadowbox plan calls for traffic signals (and not a roundabout) at this location. This is one example of how Shadowbox runs counter to Dockweiler. We request the City to do a side-by-side comparison of Shadowbox and Dockweiler. Whatever differences are found should be explained and analyzed. Dockweiler is going forward based on certain assumptions and goals to be achieved. How do the changes Shadowbox requests impact those assumptions and goals? Are some of the goals frustrated by Shadowbox's own traffic design? If they are, then the plan for Dockweiler needs to be re-examined.

Standing alone, the City approved the Dockweiler extension to improve traffic and address safety issues. Is Shadowbox in compliance with those goals? These are issues that should be addressed.

Once the draft EIR has been reviewed, PCPOA will have additional comments and concerns. In concept, PCPOA is not opposed to a movie studio in Placerita Canyon so long as its impact to the existing community is minimal, and the project adheres to the Standards adopted ten years ago. As it stands now, based on the project presented last year, Shadowbox does not meet these requirements.

Sincerely,

KANOWSKY & ASSOCIATES

Carl J. Kanowsky, Esq.

CJK/as
Encl.
cc: Clients

From: Frances Zamora
To: Erika Iverson
Subject: MASTER CASE 21-109
Date: Friday, April 7, 2023 7:27:44 PM

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Ms Iverson, I want to voice my concerns over this project. I've been here since 1955 and we've seen a lot of changes.But this has to be one of the worst and to think the city would like us to believe this wouldn't have any or very little affect on not just the residents of Placertia Cyn but all that drive thur Newhall Ave.I take it the city not aware of how bad traffic is and let alone when we have accidents or more Big trucks added to the mixed. How is it the city spent millions to fight cemex because it was harmful and bad for the community but to allow this large individual complex with 19, 55ft high buildings that doesn't fit into the Placerita canyon residential area there's no 55ft tall buildings in Newhall so why start now. This project doesn't fit into the special standards of Placerita cyn.
Don't rezone and change planning to make this fit here. It doesn't belong in the our community.

Thanks Frances Zamora

From:	Spero Bowman
To:	Erika Iverson
Cc:	Lorraine Bowman; Spero Bowman
Subject:	Development of Shadowbox Studios Project will HARM the character and quality of our Placerita Canyon Neighborhood
Date:	Friday, April 7, 2023 9:31:44 PM

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

To Whom it May Concern:

Placerita Canyon is an historic neighborhood, a hold out of open space, majestic oak trees, and the friendly blend of diverse human elements; uncrowded ranch style homes, mix of high and low income families, the respectful Melody Ranch studios, and a private college campus that beautifully reflects the rustic country style of our canyon. Despite the diversity, there is a shared taste for remote habitat away from the busy-noisy city scene and a mutual respect for personal privacy. There's a price paid to live in Placerita Canyon, although paying the same property tax as other neighborhoods, Placerita Canyon does not receive the same city services. Its worth it, though, to live amongst natural beauty, enjoy space between oneself and your neighbors, breathe fresh air, and to rest in the quiet nights.

The project to build a film and TV studio campus on 93 acres adjacent to the Placerita neighborhood threatens the character of the community and the value of its property and homes. The traffic will pollute the air, pierce the quiet with the drone cars, and impose busy streets impeding entry and exit from the canyon. The studios will bring employees and clientele into the canyon who do not share the community character nor inclined to respect it. The natural terrain of the open space buffering the neighborhood from railroad with its beautiful oak trees, will be replaced by ugly, industrial box type buildings.

Our home is a stones throw from the property where these studios will be built. In addition to the lasting demise of the canyon beauty and quiet, we will have to endure months of building invasions on our daily lives; noise, dirt, extra traffic.

It doesn't seem fair. We bought this home, and paid a higher price for location, in order to enjoy the special ambiance of 'Placerita Canyon' living. I hope city representatives act to protect the unique character of the Placerita Canyon neighborhood, as well as preserve the property values of home owners.

Spero and Lorraine Bowman
22209 Oak Orchard Road
Newhall

From: cathy zamora
To: Erika Iverson
Subject: Master Case 21-109
Date: Monday, April 10, 2023 8:02:09 AM

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Hello Ms. Iverson, I want to voice my concern over this project. The location is a very poor one I truly don't understand how one can say it won't have an effect. How can the city not be aware that Newhall Ave is two lanes that goes to 3 and back to 2 lanes than let's not forget when the buses are stopped its a problem now on top of the traffic from when the train is stopped at Market St .Now we want to add more lanes coming into 13st mixed with bid rigs and more vehicles and let us not forget the extra stop lights .It will be worst than Serria hwy and Via Princessa that is a poor design and can never be fixed. I don't understand how one buys a property that knows he is very limited to what he can do with it.Than wants the city to bend to what he would like to have. He was told up front it won't fit or work but here we are the city wanting to make it fit for one person at the expense of so many. The size of all the tall industry buildings doesn't fit into Placerita canyon residential community or within the special standards district.

Thank you Cathy Zamora

From: Carmen Ledesma
To: Erika Iverson
Subject: Project Applicant: LA Railroad 93, LLC
Date: Saturday, April 8, 2023 4:11:42 PM

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

To whom it may concern, my name is Savino Ledesma and I live in the Alderbrook Drive neighborhood. I have received a letter about the project proposal to use the Metropolitan Water District property along the south of Placerita Creek to provide vehicle and trailer parking spaces. If this proposal goes through it will ruin the wildlife around my neighborhood. That space should not be used for parking for trailers or vehicles. It will also cause a lot of noise pollution which will disturb the neighborhood which may be non stop traffic.
Thank you, Savino

Savino Ledesma
24723 Alderbrook Drive
Newhall, CA 91321
(661) 414-6995
savino.ledesma101@gmail.com

27th April 2023

To whom it may concern,

My name is Savino Ledesma and I have been a homeowner on Alderbrook Drive for over 12 years. I have lived in Santa Clarita for over 25 years. My wife and I have been able to grow our family and live comfortably in this area. I am writing this letter in concern of the Blackhall Studio Project possible construction.

This project is too big for this area. This is a neighborhood with small exits including the Placerita Canyon exit and 13th Street intersection. These exits will not accommodate residents' needs if the studio is created. It will cause more traffic. In case of emergency, residents, the students and faculty at Master's University will have a hard time evacuating which can put many people in danger. Finally, at times the railroad crossing goes through maintenance and malfunctions. When this happens traffic gets backed up and causes delays. The studio will cause even more traffic.

Construction will also ruin the wildlife that we have in this area. This area will destroy the habitats and displace the animals that live nearby. The proposal to use the Metropolitan Water District property along the south of Placerita Creek to provide vehicle and trailer parking spaces will also destroy the wildlife. This space should not be used for parking trailers or vehicles.

Sincerely,

Savino Ledesma

May 7, 2023

TO: Erika Iverson

Associate Planner at City of Santa Clarita

RE: Master Case 21-109 City of Santa Clarita Planning Commission for the

Hearing on Shadowbox studio project

Ms. Iverson,

I am writing to express my and my husband Russ's concern about this Shadowbox studio project. The location for this project is not zoned for the size and type of project.

There is no regard for the residents who are living in this rural neighborhood, the oak trees which will be removed, that are supposed to be protected, or the impact it will have on the flow of traffic in and out of the canyon which right now, at times, backs up on Newhall Avenue from the Highway 14 exit to the railroad crossing into the canyon. Traffic in the canyon will become so congested with the number of vehicles proposed for this site.

Why doesn't the city see the Negative impact this project will have on our rural way of living in Placerita Canyon?

How can someone who is not living in our area think they know what is best for our city and especially our neighborhood. The Shadowbox project has an apparent lack of concern for the welfare of our neighborhood, or the negative impact the Shadowbox project will have on our way of life.

Thank you for your time.

Russ and Sharon Melton

24763 Golden Oak Lane

Newhall, Ca 91321

Robert L. and Barbara K. Kennedy
21366 Placerita Canyon Road
Newhall, CA 91321

May 3, 2023

City of Santa Clarita Planning Division
Attn: Erika Iverson, Senior Planner – Shadowbox Studios Project
23920 Valencia Blvd., Suite 302
Valencia, CA 91355

Re: Proposed Shadowbox Studio Project (Master Case 21-109)

Dear Santa Clarita City Council and Planning Commission,

My wife and I attended the City Council Meeting April 18, 2023 to learn more and to hear developer, public, and city comments concerning the proposed Newhall Shadowbox project. We listened objectively and observed what was proposed by the developer and after much consideration, we feel this project is out of place at its present proposed size for this location. Besides changing the fabric of the Placerita Canyon area we have multiple concerns that are outlined as follows:

- The number of workers and vehicle traffic for a studio at this location will overwhelm the ingress and egress to this location. We have over 400 homes, three churches, Masters University all located in Placerita Canyon. We understand the railroad crossing, 13th Street and Arch Streets will be widened and Dockweiler Dr. will extend from its present terminus and connect to Arch Street but it's not enough. The Dockweiler Road connection leads to Sierra Hwy but does not give any better access to the freeway. All of this around a residential area. Doesn't make sense.
- Studios run 24/7 which is a problem for residential areas. We presently experience that with Melody Ranch Studio that is located in Placerita Canyon right in the middle of

residences. Vehicles come and go at all hours of the day and night with their noisy trucks and trailers banging and making excessive noise along with the larger trucks using their Jake Brakes. The reality is the workers could care less about the residents and the owners of the studio do little, if anything to combat the problem. This is not fair or right for a residential neighborhood. Furthermore, filming is occasionally conducted in the middle of the night with gunshots and large lights that illuminate the surrounding homes and yards.

- The sheer size of the complex. Nineteen Sound Stages, fifty-five feet tall? Almost three thousand parking spaces, over two hundred and fifty trailer parking spaces? Office Building, Parking Structure, Catering Department. Wow, massive, especially in a residential area.
- We heard a few people referring to Santa Clarita being "Hollywood North". Have these people seen Hollywood lately? Is this something to strive to be? We think no. The crime, prostitution, drug use, etc., etc., is not anything we would like to see in our great "Awesome Town" city! The city council needs to take into consideration the long-term implications and legacy of the city and not revolve today's decision around the money aspect. Revenue is very important but shouldn't be the driver.

I have been a resident in Placerita Canyon since 1965 and my wife since 1974. We urge you to reconsider this project and do the right thing, either have it massively downsized or moved to a more appropriate location.

Thank you for your consideration.

Sincerely,

Robert L. Kennedy

Barbara K. Kennedy

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:20 AM
To: Lisa Howe
Subject: FW: Placerita Cyn/ Shadow Box

-----Original Message-----
From: Isaac Zamora <661izamora@gmail.com>
Sent: Monday, May 15, 2023 4:41 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Placerita Cyn/ Shadow Box

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Erika,

I am opposed to the development of the open field in Placerita Canyon. Shadow Box studios is trying to make an oversized project fit. I hope that the city does not allow Shadow Box to build 19 fifty five foot sound stages. I live near Melody Ranch and when they are filming the residents have to deal with the added traffic. The traffic and the equipment they use run all hours of the day.

An alarming concern is that we only have two entrances and exits in the canyon. In case of an emergency I do not see how the residents and students at Maters University could safely evacuate the canyon.

I hope that the city reviews this development closely and realizes that the Shadow Box development does not fit in the canyon nor within our special standards.

Thank you,

Isaac Zamora

Sent from my iPhone

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:20 AM
To: Lisa Howe
Subject: FW: Santa Clarita Planning Commission. Saving oak trees in Old Town Newhall area development. Request to extend comment period.

From: paladinesq@aol.com <paladinesq@aol.com>
Sent: Monday, May 15, 2023 5:35 PM
To: paladinesq@aol.com
Subject: Santa Clarita Planning Commission. Saving oak trees in Old Town Newhall area development. Request to extend comment period.

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Dear Planning Commission, Mayor and City Council:
I am opposed to cutting down oak trees in the Old Town Newhall area for development.
Trees are important to the environment, wildlife and to the community. They should be protected from development.
The proposed development should have to leave the trees alone.
It is not OK to keep cutting down many trees for never ending developments. There is a limit to removing trees for development, and we are at that limit now.
Please protect the 12 old growth oak trees at the planned development, including the heritage oak tree.

This project will change the character of Old Town Newhall in a negative way.
Please allow more time for review by extending the comment period to 120 days.
Please copy to all planning commissioners.

John Paladin. 661 255 5000. PaladinEsq@AOL.com
Box 801777, Valencia, CA 91380.

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 10:32 AM
To: Lisa Howe
Subject: FW: Blackhall Studio project master case 21-109

From: Kevin Ward <kward50031@gmail.com>
Sent: Tuesday, May 16, 2023 9:47 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Re: Blackhall Studio project master case 21-109

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Erika, This is Kevin Ward a resident of Placerita Canyon for 30 years, I have worked and run a Motion Picture company for 40 years and I have submitted a prior comment. As I have stated before I am not against studios or progress but with my experience I felt this project was too big and now after attending the meeting on 4/18/23 I know it is and I am not for it.

I do not know where the city is expecting this non-stop flow of vehicles to go? This includes tractor trailers, crew cabs, craft trucks, lighting trucks, grip trucks, lumber trucks, paint trucks, personal vehicles and many more. Studios the size of which you are planning have many entrances for a reason.. this project has two and they are in a neighborhood. This area will be destroyed. You can't make a turn from 13th to Railroad now without being in a traffic backup.

Another issue with this project is the height of the buildings and size of the project. How can the city say this is not going to negatively impact our lives? you are building a city in a neighborhood.

The developer seems to make promises of employment as well as visiting local businesses for support. This is a four-wall rental Studio they have no control where production companies get their crews from and the developer has never visited anyone I know in this neighborhood to ask any opinion.

I appreciate the opportunity to express my concerns and I hope the city considers a much smaller project, one that works for all Santa Clarita residents

Thank you

Kevin Ward

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 5:09 PM
To: Lisa Howe
Subject: FW: Mastercase 21-109

From: Joe Morelli <hosstyl67@gmail.com>
Sent: Tuesday, May 16, 2023 5:07 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Joe Morelli <hosstyl67@gmail.com>
Subject: Mastercase 21-109

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Hello City planning commission,

I have concerns and comments that need to be addressed by the city planning department.

One of the very first things is they're no impact or physical divide to an established community and will not affect Placerita Canyon or the Special Standard District...

Then why are we rezoning.

My question is did the city zone this property incorrectly to begin with....I don't think so, it went through 2 city planning reviews over 36 years now without any zoning changes.

Why is the city even entertaining someone to come in and push their agenda on the residents and the city.

Also why does this area need to become a Job Overlay Zone and have 20-55feet tall industrial buildings. Over 3/4 of the project are individual buildings that are taller than 55 ft.

There are only five buildings in all of Santa Clarita that are above 49 ft tall as of right now and not one in Newhall.

So why does Placerita Canyon need 20 of them...we don't...

Why not leave it 35 feet tall... Like Needham ranch studios that are only a few years old now and in a large industrial park. That are not in or around an established rural residential community protected by the Special Standards District.

Once again Jeff Webber purchase the property but did not do his due diligence the One Stop MC20-016 and City already said the project doesn't fit and again, I don't understand how the city is going to allow someone to bully them around.

Jeff Webber makes statements that he is the new kid on the block and he wants to be helpful and listen to suggestions. Well I can tell you otherwise. I have many emails saying different. Every time you bring up something new or possible change it never works for him " not cost effective."

I understand that the city needs Jeff Webber's property to expand Dockweiler.

Is it my project or no Dockweiler easement for expansion....I don't know..

I would also like the city to review the scripted One Click Politics it is nothing more than a political campaign to manufacture support and be misleading.

Using a work address to establish residency is not only dishonest, but it's fraud. I would like the commissioners to consider that some of the one click politics, support forms falsely identifies signers "as residents of Placerita Canyon " when they are not residents at all. This is a blatant attempt to misleading.

All I'm asking the City not to rezone.

Thank you, An actual resident of Placerita Canyon. Joe Morelli

To whom it may concern,

Hi my name is Noemy and I live on Alderbrook Drive. The reason I am sending this email is because I do not want the approval of Shadowbox Studios. It will be right in my back alley and the structure will block all my view. Not to mention all the noise it will generate, I do not know if the Alderbrook residents know how big this project is because most of them do not attend the meetings. Or they do not want to oppose this project because Jeff said that he will look into the possibility to fix the Alderbrook road. I know that this is such a big project that will bring a lot of traffic. I would not mind if this project was created in a commercial area not near my residential area. I also hope that the Water Metropolitan does not approve the request to use the space for trailer parking because that will be 50 to 60 feet from my backyard.

Thank you, Noemy Ledesma

From: David Hong <david_hong@sbcglobal.net>
Sent: Saturday, May 20, 2023 4:10 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Opposition to Shadowbox Movie Studios Project in Placerita Canyon, Master Case 21-109

May 20, 2023

Ms. Erika Iverson, Senior Planner for Shadowbox Studios Project Draft EIR

City of Santa Clarita Planning Div.

23920 Valencia Blvd, Suite 302

Santa Clarita, CA 91355

VIA E-MAIL: eiverson@santa-clarita.com

Re: Opposition to Shadowbox Movie Studios Project in Placerita Canyon, Master Case 21-109

Dear Ms. Iverson:

My name is David Hong, and I live in Canyon Country.

This letter regards the zoning change proposal for Shadowbox Movie Studios Project in Placerita Canyon, Master Case 21-109. I oppose any zoning change at this site.

1. The Special Standards District for Placerita Canyon must be maintained.

From the City's ONE VISION ONE VALLEY EIR:
"Policy LU 1.2.6: In Placerita Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; maintain community character in accordance with the City's Placerita Canyon Special Standards District (PCSSD); provide an orderly transition between existing rural and low-density residential uses and proposed new development; and require the provision of needed infrastructure. The City and the Placerita Canyon Property Owners Association shall work together to amend the PCSSD in the Unified Development Code to provide additional certainty and expectations for the developed areas within the District and to create flexibility and continuity, subject to the provisions outlined above, for undeveloped properties in the District. These changes will include transitional density provisions, specific Unified Development Code (UDC) rules and regulations that will clearly outline development codes within Placerita Canyon.

Policy C 2.6.1: Require that new development construct transportation improvements or provide its fair share of the cost of transportation such improvements and ensure that required improvements or in-lieu contributions are in place to support the development prior to occupancy.

Sand Canyon The Sand Canyon area is generally located within the City of Santa Clarita, southeast of Canyon Country and is comprised predominantly of low-density single-family residential uses. The area is rural with extensive stands of oak trees and is characterized by large estate homes and lots, many of which are equestrian and enjoy direct access to an equestrian trail system linking the community. The community is accessible via Sand Canyon Road and Placerita Canyon Road and is bordered on the south and east by the Angeles National Forest. Sand Canyon is largely developed. A challenge for the Sand Canyon area will be ensuring land use compatibility between homes and adjacent natural areas in Angeles National Forest and along the Santa Clara River. Major planning issues include protecting the rural and equestrian character from development pressures to create more traditional subdivisions in this low-density area; increasing multiple purpose trail linkages; and providing an effective interface between residents and National Forest lands. In addition, development in the area must comply with the City's Special Standards District to maintain the rural community character desired by residents."

2. The equestrian nature of the community and beautiful scenery must not be changed with this type of development.

3. There are serious wildfire threats and the evacuation challenges that Placerita and Sand Canyon face every year.

If this proposed zoning change allows over 3000 people working at the proposed studios, this will lead to a disaster that we cannot allow.

There are many other locations in our city that can better house production studios for 3000+ people.

Very truly yours,

/s/ - David Hong, Esq.

David Hong, Esq.,
LAW OFFICE OF DAVID HONG
Patent, Trademark, and Intellectual Property

Mailing Address: P.O. Box 2111, Santa Clarita, CA 91386-2111
U.S. and Canada Tel & Fax: 866.824.8680 (toll-free)
Mobile & International Tel: 805.807.0515
E-Mail: david.hong@dhpatentlaw.com or david_hong@sbcglobal.net.
SKYPE: david.hong.esq

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May 21, 2023

Ms. Erika Iverson
Senior Planner for Shadowbox Studios Project Draft EIR
City of Santa Clarita Planning Division
23920 Valencia Blvd, Suite 302
Santa Clarita, CA 91355

VIA E-MAIL: eiverson@santa-clarita.com

Re: Opposition to Shadowbox Movie Studios Project in Placerita Canyon, Master Case 21-109

Dear Ms. Iverson:

As a long-time resident of Canyon Country, I oppose the Shadowbox Movie Studios Project in Placerita Canyon, Master Case 21-109, as proposed by the developers, including the proposed zoning change and removal of large oak trees, among other issues.

I also request a time extension for public comments on the EIR as this is a very large and complex project, and the EIR was released during the Spring holiday season, with limited public awareness, which will unreasonably restrict the public input on the EIR for such an impactful project.

My objections to this project include the following:

The Project directly and significantly conflicts with the Placerita Canyon Special Standards District purpose as stated in the City code: "The purpose of the Placerita Canyon special standards district (PCSSD) is to protect, maintain, preserve and enhance the secluded, rural equestrian character of the community, to enhance the community's unique appeal and to help mitigate the cumulative impacts of residential development."

This project is a large, dense commercial development which is not compatible with the rural equestrian character of Placerita Canyon.

The proposed size of the project also will endanger the lives of Placerita Canyon residents, and those working at the studios, in the event of any wildfire that threatens this area because there is only one way for vehicles to get out of Placerita Canyon, which exit is already too limited to quickly evacuate the existing residents in an emergency. Adding 3000 studio workers would be catastrophic in a wildfire which are unfortunately too common in Santa Clarita.

The project must be substantially downsized to be less conflicting with the character of the surrounding community. The developer should be required redesign the project to preserve the ridgeline in compliance with the City's ridgeline ordinance, lower the heights of the buildings to no more than 2-3 stories to maintain the character of the community, and preserve and protect the mature oak trees on the site.

Sun,21 May 2023 23:43:28

The developer should also be required to develop an alternative emergency exit route from the project site for evacuation of studio workers in the event of wildfire or other emergencies, so that they do not add to the number of residents trying to evacuate using the current exit route during an evacuation.

The above changes are a reasonable concession for the developer in exchange for entitlements for the downsized project in such a desirable area. If the developer cannot manage to revise the project to meet these requirements, they should find another area in which to build this large, dense commercial project.

Sincerely,

Susan M. Carey

Susan M. Carey

27143 Crystal Springs Road
Canyon Country, CA 91387

From: Dinah Sargeant <ddsargeant@gmail.com>
Sent: Sunday, May 21, 2023 12:49 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: public comment for Shadowbox

Please find attached our public comment for the Shadowbox proposal.

Sincerely,
Dinah Sargeant and Nick Lombardo
22019 Brei Ct, Newhall, CA 91321

Shadowbox Studio Master Case 21-109 Public Comment

Dear City Council members and Planning Commission,

As 39 year residents of Santa Clarita Valley and 27 year residents of Placerita Canyon,

I've been happy to see our city grow and protect our neighborhoods and environment.

But we are writing you today about the Shadowbox Studio project.

The property along Railroad and 13th Street has been vacant and undeveloped for a long time.

The proposal for the Shadowbox Studio strikes us as too large and with too much impact.

The intersection of 13th and Railroad is now often overcrowded with residential and Master's College traffic. Adding another 1,000 cars and trucks for the studio will overwhelm that vital intersection of our canyon.

The plans as they are now presented by Shadowbox force all of those activities close to the intersection of Railroad and 13th. No planning on infrastructure for any additional access points on the back of the property or along Railroad are planned. The city never finished the extension of Dockweiler, but that does not fully address any emergency evacuation plan.

The proposal for Shadowbox takes care of the simple needs of the studio without considering what would happen in an emergency in our canyon.

We are not against people trying to operate a business in the Santa Clarita Valley but this feels too large without infrastructure investment. Why this property was zoned commercial so close to residential remains a mystery but an active studio with the scale and size proposed seems overwhelming.

So we ask you to reject and amend the Shadowbox proposal until a better road and infrastructure is in place.

Dinah Sargeant and Nick Lombardo 22019 Brei Ct, Newhall, CA

Lisa Howe

From: Erika Iverson
Sent: Monday, May 22, 2023 7:43 AM
To: Lisa Howe
Subject: FW: Blackhall Studio project master case 21-109

From: Kevin Ward <kward50031@gmail.com>
Sent: Sunday, May 21, 2023 3:37 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Re: Blackhall Studio project master case 21-109

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Erika,

My name is Kevin Ward I have been a resident of Placerita Canyon for 30 years,I have worked and run a motion picture business for 40 years and I have commented previously on this issue.

After the meeting on 4/16/23 I am 100% against this project.

A few of my main concerns and how it will negatively impact life here have been over traffic and trucks, the 55 ft tall buildings and how this will affect life for the one or two years they are building this?

The developer and his so-called paid for traffic advisor showed a 13th Street and Railroad traffic simulation, when was this done? I am very familiar with the traffic at this intersection from 6 to 10 every morning and from 3 to 7 every afternoon and there are cars everywhere, not to mention if someone is doing a U-turn or a train is coming, cars are backed up, why did he not show that? Or where are the 15 to 20 tractor trailers backed up with the 20 to 30 5 ton trucks and all the other craft trucks trying to get into the studio at 6 in the morning? why did he not show that? This simulation was completely untrue from reality here.

Regarding the Dockweiler connection and all the traffic that it is going to redirect off Railroad. Why did the paid for professional not mention that Dockweiler goes through apartment complexes and condominiums? and there's no parking or room on the road already? or that Dockweiler ends at Sierra Highway where car will go right back to Railroad?, once again completely untrue from reality here.

And regarding the 55 tall buildings. The developer compares himself to Master's College or Melody Ranch, completely untrue, both of those facilities fit into the Placerita Canyon landscape very nicely, this developer claims that his 20 or 30 55 tall buildings are not going to impact anybody, how can the city allow this eyesore? Why would the city negatively affect so many people by doing this?

I understand the developer has been going around to businesses promising money and promising jobs to get support, when the fact is this developer cannot promise anything. He cannot promise that any production companies are going to buy anything from here or hire people here and thier is a good reason why he's not talking to residents here, he knows it's going to be a complete disaster.

Why is the developer not giving money to the residents that have to live next to this? Or have to put up with this while it's being built?

This project is no fit for a very congested Newhall area already

Thank you

Kevin Ward

From: cathy zamora <czamora433@gmail.com>
Sent: Monday, May 22, 2023 3:24 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Re: Master Case 21-109

I'm not In favor of this project as it will interfere with business. As I understand we will be losing our parking and traffic in front will be worse .Placerita is a special standard district so why would the city planning even consider this or even be ask to think about rezoning the area?? hurting the small bussiness that are right here.This would workout just not in the center of town affecting so many with the traffic this will bring. Adria Adams

On Fri, Apr 7, 2023, 6:07 PM cathy zamora <czamora433@gmail.com> wrote:

> Hello Ms. Iverson, I want to voice my concern over this project. The location is a very poor one I truly don't understand how one can say it won't have an effect. How can the city not be aware that Newhall Ave is two lanes that goes to 3 and back to 2 lanes than let's not forget when the buses are stopped its a problem now on top of the traffic from when the train is stopped at Market St .Now we want to add more lanes coming into 13st mixed with bid rigs and more vehicles and let us not forget the extra stop lights .It will be worst than Serria hwy and Via Princessa that is a poor design and can never be fixed. I don't understand how one buys a property that knows he is very limited to what he can do with it.Than wants the city to bend to what he would like to have. He was told up front it won't fit or work but here we are the city wanting to make it fit for one person at the expense of so many. The size of all the tall industry buildings doesn't fit into Placerita canyon residential community or within the special standards district.
>
> Thank you Cathy Zamora

From: Louis Esbin <louis@esbinlaw.com>
Sent: Monday, May 22, 2023 4:37 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>; Jason Crawford <JCRAWFORD@santa-clarita.com>
Subject: Shadowbox Studios - EIR Comment

Dear Santa Clarita Planning Commission,

I am writing to inquire about draft EIR for Shadowbox Studios development. I am concerned about the increase in traffic at the 13th Street crossing, as well as increased traffic through the Placerita Canyon and through the Sierra Highway Gate.

You see, my property is located at 21005 Placerita Canyon Road, on which the entirety of the Sierra Highway Gate is located. As opposed to other homeowners within the "Canyon," my property extends across the street to the property across the street, such that ALL traffic heading out to Sierra Highway not only passes by my property, but through it.

Take today, as an example, where the 13th Street crossing was impassable. The sheriffs directed people to exit through the Sierra Highway Gate, leading to a long line of cars blocking my safe ingress and egress to my property. This is unacceptable! This is not the first time this has happened. Both the approval for the Shadowbox studios (which I do not oppose, subject to my herein concerns being addressed and adopted) and the Dockweiler extension have the same unresolved issue… the 13th Street at grade crossing.

There is a workable solution that is good and fair to all concerned. Along with other studies, there MUST be a study to incorporate into both plans a crossing for traffic that is below the 13th Street railroad tracks crossing. This can be done by keeping the tracks at their current grade and having traffic move below the tracks. Alternatively, there is a hybrid situation, where the tracks are partially elevated (limited by their proximity to the station) and the traffic flows under the tracks. Of course, the distance between the tracks and the road must accommodate the tallest bus or tractor trailer.

In conducting the necessary studies and implementing this plan, the concerns of all stakeholders (PCPOA residents, Metro, Shadowbox, City Council, LACSD, and LACFD) can be taken care of, because a safe and unimpeded second egress and ingress from and through the Canyon will be realized through the modified 13th Street crossing. It may cost more, but the investment in a long-term safety solution during fires and an inevitable earthquake, combined with traffic from Shadowbox and Dockweiler, will be met.

Thank you in advance and best regards,

Louis J. Esbin
21005 Placerita Canyon Road
Newhall, CA 91321
Cel: 661-305-8995

City of Santa Clarita Community Court Judge (2008-2022).
Past President, Santa Clarita Valley Rotary Club (2014-2015) and member since 1993.
Co-founder Santa Clarita Valley Bar Association.

From: Dianna Lambrecht
To: Erika Iverson
Subject: Re: Shadowbox Studios Project - Notice of Availability of the Draft Environmental Impact Report
Date: Thursday, April 6, 2023 4:15:11 PM

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I am very happy with the project!!! A real asset to the community!!!!

> On Apr 6, 2023, at 3:24 PM, Erika Iverson <EIVERSON@santa-clarita.com> wrote:
>
> Hello:
> You are receiving this email because you have indicated that you would like to receive notifications on the Shadowbox Studios Project, Master Case 21-109.
>
> This email is to inform you that the Draft Environmental Impact Report (DEIR) for the Shadowbox Studios is available for public review. The public review and comment period for the DEIR will be from April 6, 2023, to May 22, 2023.
>
> The DEIR is available for public review on the City of Santa Clarita website at:https://www.santa-clarita.com/city-hall/departments/community-development/planning/environmental-impact-reports-under-review
>
> The City of Santa Clarita Planning Commission will conduct the first public hearing on this matter on the following date, during which the project will be introduced and described:
>
> DATE: Tuesday, April 18, 2023
> TIME: At or after 6:00 p.m.
> LOCATION: City Hall, Council Chambers
> 23920 Valencia Blvd., First Floor
> Santa Clarita, CA 91355
>
> Please see the attached Notice of Availability for additional information on the release of the DEIR.
>
> Thank you,
>
> Erika Iverson
> Senior Planner
> Planning Division
> City of Santa Clarita

Phone: (661) 255-4962
Email: eiverson@santa-clarita.com
<image001.jpg>

<Shadowbox Studios NOA_final_signed.pdf>

Lisa Howe

From: Erika Iverson
Sent: Monday, April 17, 2023 2:45 PM
To: Lisa Howe
Subject: FW: Support the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:25 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a member of the film industry in the Santa Clarita Valley, I am pleased to support the proposed Shadowbox Studios project. It's no secret that Hollywood is the entertainment capital of the world. And Santa Clarita, located just 25 miles to its north, has played a starring role in the entertainment industry as Hollywood's backlot. The town's natural landscapes and varied cityscapes have long provided a versatile backdrop for filmmakers. The past several decades has also seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the SCV. Therefore, once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production. In 2022, the City of Santa Clarita generated an estimated $38.5 million in economic impact to the local community from filming. Many factors have contributed to the continued success and appeal of filming in Santa Clarita, including the City's Film Incentive Program, Movie Ranch Overlay Zone, low-cost permit fees and expedited permit processing, along with the California Film and Television Tax Credit Program. Shadowbox Studios will only compliment the already existing filming features Santa Clarita hosts. The film community here works as a family. As one studio is at capacity, they are quick to recommend a neighboring studio, based on what the production is looking for. The existing filming community welcomes Shadowbox Studios with open arms. Their studio project will bring in what our current infrastructures have less of. I urge the Planning Commission to recommend approval for this project and allow us to work locally in an industry that is proud to call Santa Clarita home.

Sincerely,
Jason Altman
j.altman@elitemediatek.com
26320 Diamond Place Santa Clarita, CA 91350 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Monday, April 17, 2023 2:45 PM
To: Lisa Howe
Subject: FW: I Support the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: I Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: I Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Santa Clarita is Hollywood North, and we have an abundance of talented people who work in the film industry living right here in our city. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. The Planning Commission must see this is the best possible project for our community and the City. You must recommend approval for the project and allow it to move on to the next step.

Sincerely,
Mr. Chris Crase
chris.crase.cc@gmail.com
24943 Alderbrook Drive Newhall, CA 91321

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:45:34 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:31 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mitzi Like
mitzil@lbwinsurance.com
28055 Smyth Drive Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:45:41 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:33 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. David M Rendall
grouponeinvestments@gmail.com
26556 Valley Oak Lane Valencia, CA 91381

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:45:51 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:38 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

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Sincerely,
Michael H Metcalf
michaelandbrenda@msn.com
29215 Truman Court Santa Clarita, CA 91350 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:45:59 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:40 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Nicole Miller
nicole.miller@gmail.com
27813 Villa Canyon Rd Castaic, CA 91384

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:07 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 3:48 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Troy Hooper
troyhooper@gmail.com
28631 N Pietro Drive Santa Clarita, CA 91354 Constituent

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SUPPORT - Shadowbox Studios Project
Date:	Monday, April 17, 2023 2:46:13 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:22 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Ms. Lois Bauccio
loisbauccio@gmail.com
25642 Fedala Rd. Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:20 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:28 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Vaughn Gillman
gillman.v@gmail.com
23735 Stagecoach Way Santa Clarita, CA 91354 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:27 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:29 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Brenda Metcalf
brenda_j_metcalf@msn.com
27720 Dickason Drive Santa Clarita, CA 91355 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:37 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:32 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Dean Cox
dean@crissmancommercial.com
25129 The Old Road, Suite 212 Santa Clarita, CA 91381 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:43 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:40 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Matt Drago
matt@mattdrago.com
24236 Lema Drive Santa Clarita, CA 91355 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:51 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 4:49 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a long time resident of Santa Clarita, I am excited to have more job opportunities here in town and continue our long time support of the entertainment industry. Sincerely, Carlo Pietrosanti

Sincerely,
Mr. Carlo Pietrosanti
carlo@pietrosanti.com
24053 Dearborn Dr Valencia, CA 91354

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:46:57 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 5:05 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Dennis Verner
dverner@burrtec.com
28907 Deodar Place Santa Clarita, CA 91390 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:03 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 5:06 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Ivan Volschenk
ivan@evolvebizstrat.com
Lucerne Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:09 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 5:54 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Ms. Kathy Salisbury
reverian.mom@gmail.com
24510 Aden Avenue Newhall, CA 91321

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:18 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 6:08 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Dr. Harleen Grewal
harleen@doctorgrewal.com
22380 Riverstream Ct Santa Clarita, CA 91350 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: I Support the Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:24 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Friday, April 14, 2023 7:43 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: I Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: I Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Santa Clarita is Hollywood North, and we have an abundance of talented people who work in the film industry living right here in our city. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. The Planning Commission must see this is the best possible project for our community and the City. You must recommend approval for the project and allow it to move on to the next step.

Sincerely,
Mrs. Martha garcia
lopezmartha506@yahoo.com
24949 , Alderbrook dr Newhall, CA 91321

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SUPPORT - Shadowbox Studios Project
Date:	Monday, April 17, 2023 2:47:37 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 7:42 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction. Sincerely, David Bossert

Sincerely,
Mr. David Bossert
bossert.dave13@gmail.com
25641 Shaw Place Stevenson Ranch, CA 91381

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SUPPORT - Shadowbox Studios Project
Date:	Monday, April 17, 2023 2:47:43 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 7:50 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Jenn Wilder
jenn@nealweichel.com
23833 Laurelwood Ln. Valencia, CA 91354

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Support Shadowbox Studios
Date: Monday, April 17, 2023 2:47:48 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 7:56 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Support Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Newhall/Valencia, and a neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Shadowbox Studios will join the filmmaking legacy in Santa Clarita and improve the City's jobs and housing balance by creating high-quality jobs. The project will benefit our Newhall community with: • A secure studio campus with 24-hour security and monitoring. • One point of contact for our neighbors for easy communications. • Studio entrance designed to efficiently move traffic in and out of the campus. • Trail extension/access from Placerita to downtown Newhall and Metrolink. Further, the buildings are designed with an architectural sensibility that respects the community characteristics of both the local residential neighborhood and downtown Newhall. The Railroad Avenue frontage pays homage to the urban, mixed-use aesthetic of Main Street Newhall. As local residents, we walk to downtown Newhall regularly and support those local businesses and the Newhall Farmers Market. Having had the chance to look at the Shadowbox Studios plan, I think it will be a very welcomed addition to our neighborhood and the City. Santa Clarita is Hollywood North, and we have an abundance of talented people who work in the film industry living right here in our city. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. The Planning Commission must recommend approval of this project and allow for the City Council to vote on its approval, so we are able to break ground. This project is the best and most viable option to go into that location. We must not let a great opportunity pass us by. Please recommend approval of this project.

Sincerely,
Brian Schlick
brian@schlickart.com
23112 Yvette Lane Santa Clarita, CA 91355 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:53 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 1:26 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Kevin Derr
kevinderr@sbcglobal.net
27323 Shelburne Dr Valencia, CA 91354

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:47:58 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 2:17 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I support the Shadowbox Studios project. I am a 45-year resident and have watched the industry grow in Santa Clarita. Production is a great fit for our community. I know that the existing studios see newcomers not as competition, but as a way to burnish the City's already great reputation as place to film. I live in Happy Valley and experience filming frequently. I find the crews friendly and concerned about disrupting neighborhoods as little as possible. I have spoken with Shadowbox's Jeff Webber and was impressed for their plans for the space they have chosen to develop. I believe, like the other local studios, they will active participants in many facets of Santa Clarita life and welcome their project. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Dr. Marc Winger
mwinger47@gmail.com
23308 Cedartown Street Santa Clarita, CA 91321 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:48:05 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 5:43 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
SUSAN KLINE
sklinerealtor@aol.com
28620 Vineyard Ln Castaic, CA 91384

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 2:48:12 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, April 15, 2023 10:13 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction. Sincerely, Anthony F. Gigante

Sincerely,
Mr. Anthony Frank Gigante
afgigante@gmail.com
24630 TOWN CENTER DR, APT 1305 Valencia, CA 91355

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SUPPORT - Shadowbox Studios Project
Date:	Monday, April 17, 2023 2:48:24 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Sunday, April 16, 2023 5:35 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Neal Weichel
neal@nealweichel.com
25532 Morning Mist Stevenson ranch, CA 91381

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios Project Now
Date: Monday, April 17, 2023 4:49:06 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 7:00 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios Project Now

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios Project Now

Ms. Erika Iverson - City Planner,

Dear Planning Commissioners: What has taken so long to get the Shadowbox project moving? 4000 high paying jobs and massive economic impact is escaping our city month after month. All the restaurants on Main Street could have doubled their sales each month this project sits. Why wait one more day? As a resident of Circle J Ranch Estates and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my complete support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. The Planning Commission must see this is the best possible project for our community and the City. You must recommend approval for the project and allow it to move on to the next step. Please do.not sit on this more day. Denise Lite 21649 Parvin Drive Santa Clarita 91350 818-522-6482

Sincerely,
Mrs. Denise Lite
dplacencio@dacorsi.net
21649 Parvin Drive Santa Clarita, CA 91350 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Support the Shadowbox Studios Project
Date: Monday, April 17, 2023 4:49:44 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 8:25 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a member of the film industry in the Santa Clarita Valley, I am pleased to support the proposed Shadowbox Studios project. It's no secret that Hollywood is the entertainment capital of the world. And Santa Clarita, located just 25 miles to its north, has played a starring role in the entertainment industry as Hollywood's backlot. The town's natural landscapes and varied cityscapes have long provided a versatile backdrop for filmmakers. The past several decades has also seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the SCV. Therefore, once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production. In 2022, the City of Santa Clarita generated an estimated $38.5 million in economic impact to the local community from filming. Many factors have contributed to the continued success and appeal of filming in Santa Clarita, including the City's Film Incentive Program, Movie Ranch Overlay Zone, low-cost permit fees and expedited permit processing, along with the California Film and Television Tax Credit Program. Shadowbox Studios will only compliment the already existing filming features Santa Clarita hosts. The film community here works as a family. As one studio is at capacity, they are quick to recommend a neighboring studio, based on what the production is looking for. The existing filming community welcomes Shadowbox Studios with open arms. Their studio project will bring in what our current infrastructures have less of. I urge the Planning Commission to recommend approval for this project and allow us to work locally in an industry that is proud to call Santa Clarita home.

Sincerely,
Mr. Keith Raskin
keith.raskin@gmail.com
25852 McBean Pkwy, Suite 1101 Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 4:49:54 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 9:01 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Matthew Nelson
huatonelson@mac.com
28139 Bobwhite Circle Unit 90 Santa Clarita, CA 91350 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: I Support the Shadowbox Studios Project
Date: Monday, April 17, 2023 4:50:14 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 10:17 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: I Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: I Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Santa Clarita is Hollywood North, and we have an abundance of talented people who work in the film industry living right here in our city. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. The Planning Commission must see this is the best possible project for our community and the City. You must recommend approval for the project and allow it to move on to the next step.

Sincerely,
Mr. Michael Schlecht
mschlecht10@gmail.com
24989 Alderbrook Drive Santa Clarita, CA 91321 Constituent

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Support the Shadowbox Studios Project
Date:	Monday, April 17, 2023 4:50:32 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 11:41 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a member of the film industry in the Santa Clarita Valley, I am pleased to support the proposed Shadowbox Studios project. It's no secret that Hollywood is the entertainment capital of the world. And Santa Clarita, located just 25 miles to its north, has played a starring role in the entertainment industry as Hollywood's backlot. The town's natural landscapes and varied cityscapes have long provided a versatile backdrop for filmmakers. The past several decades has also seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the SCV. Therefore, once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production. In 2022, the City of Santa Clarita generated an estimated $38.5 million in economic impact to the local community from filming. Many factors have contributed to the continued success and appeal of filming in Santa Clarita, including the City's Film Incentive Program, Movie Ranch Overlay Zone, low-cost permit fees and expedited permit processing, along with the California Film and Television Tax Credit Program. Shadowbox Studios will only compliment the already existing filming features Santa Clarita hosts. The film community here works as a family. As one studio is at capacity, they are quick to recommend a neighboring studio, based on what the production is looking for. The existing filming community welcomes Shadowbox Studios with open arms. Their studio project will bring in what our current infrastructures have less of. I urge the Planning Commission to recommend approval for this project and allow us to work locally in an industry that is proud to call Santa Clarita home.

Sincerely,
Mrs. Candy Veluzat
candy.melodyranch@hotmail.com
23445 Newhall Ave, Newhall, CA 91321, USA Newhall, CA 91321-3118

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Support the Shadowbox Studios Project
Date:	Monday, April 17, 2023 4:50:42 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 11:44 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a member of the film industry in the Santa Clarita Valley, I am pleased to support the proposed Shadowbox Studios project. It's no secret that Hollywood is the entertainment capital of the world. And Santa Clarita, located just 25 miles to its north, has played a starring role in the entertainment industry as Hollywood's backlot. The town's natural landscapes and varied cityscapes have long provided a versatile backdrop for filmmakers. The past several decades has also seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the SCV. Therefore, once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production. In 2022, the City of Santa Clarita generated an estimated $38.5 million in economic impact to the local community from filming. Many factors have contributed to the continued success and appeal of filming in Santa Clarita, including the City's Film Incentive Program, Movie Ranch Overlay Zone, low-cost permit fees and expedited permit processing, along with the California Film and Television Tax Credit Program. Shadowbox Studios will only compliment the already existing filming features Santa Clarita hosts. The film community here works as a family. As one studio is at capacity, they are quick to recommend a neighboring studio, based on what the production is looking for. The existing filming community welcomes Shadowbox Studios with open arms. Their studio project will bring in what our current infrastructures have less of. I urge the Planning Commission to recommend approval for this project and allow us to work locally in an industry that is proud to call Santa Clarita home.

Sincerely,
Mr. Andre Veluzat
rev.andre.candy@gmail.com
23445 Newhall Avenue Newhall, CA 91321-3118

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 4:51:16 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 2:48 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Daniel Faina
danandkatfaina@gmail.com
27300 Shelburne Dr Valencia, CA 91354

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 4:51:28 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 2:51 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Dennis Sugasawara
dennis.sugasawara@gmail.com
23924 Bar Harbor Court VALENCIA, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: I Support the Shadowbox Studios Project
Date: Monday, April 17, 2023 4:52:04 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, April 17, 2023 3:58 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: I Support the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: I Support the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As a resident of Oak Ridge, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with my community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, the Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors the lifestyle of our town. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. It will also allow for stability in this area. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Santa Clarita is Hollywood North, and we have an abundance of talented people who work in the film industry living right here in our city. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. The Planning Commission should see this as the best possible project for our community and the City. We believe it would be the best use for this area and we urge you to approve the development by Shadowbox Studios. Thank you. Sincerely. Lisa Sendewicz

Sincerely,
Mrs. Lisa Sendewicz
lsendewicz4@gmail.com
25306 Heather Vale Street Santa Clarita, CA 91350 Constituent

Prepared by OneClickPolitics (tm) at www.oneclickpolitics.com. OneClickPolitics provides online communications tools for supporters of a cause, issue, organization or association to contact their elected officials. For more information regarding our policies and services, please contact info@oneclickpolitics.com

I SUPPORT THE SHADOWBOX STUDIOS PROJECT

City of Santa Clarita
Attn: Planning Commissioners
23920 Valencia Blvd., Suite 300
Santa Clarita, CA 91355

RE: SHADOWBOX STUDIOS PLANNING COMMISSION HEARING – SUPPORT

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I know there are many things to consider as part of the Environmental Impact Report and the City will ensure any impacts are mitigated. The biggest impact to the City is the economic value of Shadowbox Studios which we've been able to quantify. The trick now is to ensure we can get this project through the process quickly and take full advantage of this moment in time when the massive amounts of digital content creation are driving the need for more studio space.

I urge your quick support for the Shadowbox Studios project.

Cynthia Kittle
Signature

Cynthia Kittle
Print Name

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Print Name

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Signature

Nancy Bossert

Print Name

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Matt Green

Print Name

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Lois Bauccio

Signature

Lois Bauccio

Print Name

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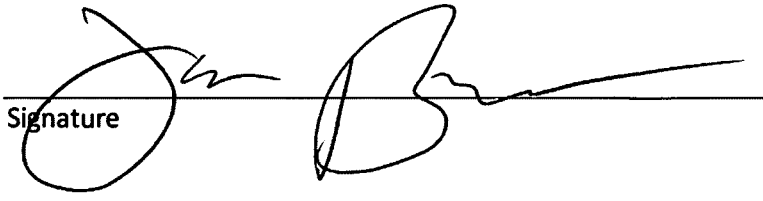

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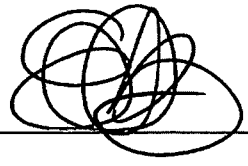

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Erika Kawzlarch-Bird

Print Name

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Signature

STEPHANIE BEARS

Print Name

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Signature

DAVID BOSSERT

Print Name

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Allyn M Brown

Signature

Allyn Brown

Print Name

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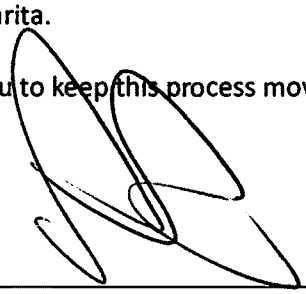

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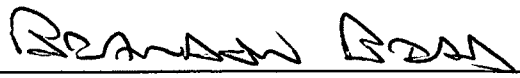

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Signature

Ralph C Dewsnup Jr.
Print Name

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Signature

James Webb

Print Name

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C. Terrell Edwards

Print Name

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SCV locations, INC
Signature

KAREN BRYDEN / SCV locations INC
Print Name

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Signature

NICOLE BRYDEN
Print Name

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Joseph Messina

Print Name

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City of Santa Clarita
Attn: Planning Commissioners
23920 Valencia Blvd., Suite 300
Santa Clarita, CA 91355

RE: SHADOWBOX STUDIOS PLANNING COMMISSION HEARING – SUPPORT

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Al Sonja Rice

Print Name

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Rob Cruikshank

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Diane Kawzlanch

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Anthony GIGANTE

Print Name

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John Lisle

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S. Mee
Signature

Shannon Mee
Print Name

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Vanessa Witt

Signature

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Kris Hough

Print Name

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Marisol Espinoza

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Joanna Darfs

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Denise Lee

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Pamela Brady

Signature

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I urge your quick support for the Shadowbox Studios project.

Signature

Loreal Guglielmetti

Print Name

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Print Name

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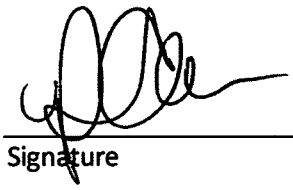

Signature

Pamela Verner

Print Name

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DV

Signature

DENNIS VERNER

Print Name

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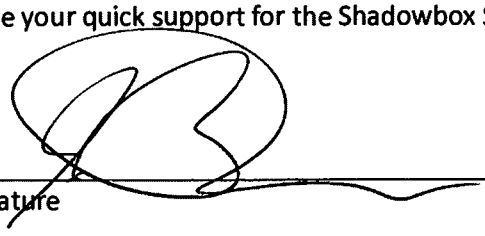

Signature

JOHN BROOKS

Print Name

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DANIELLA SMITH

Print Name

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Devon Rosenheim
Signature

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Print Name

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I urge your quick support for the Shadowbox Studios project.

Signature

Sean Robb

Print Name

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Chelsea Orzechowski

Signature

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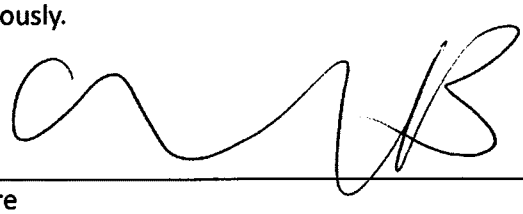

Signature

Athena Bettamo

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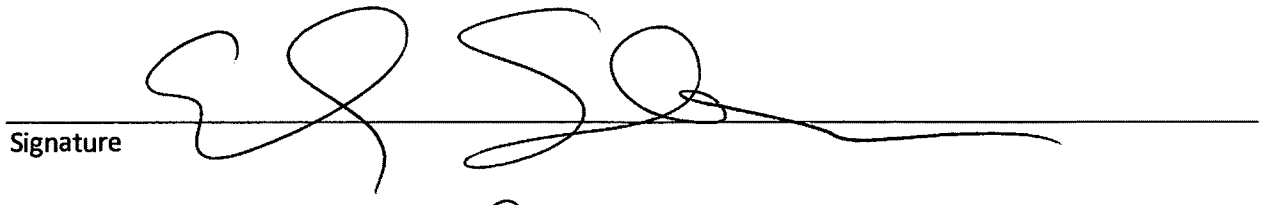

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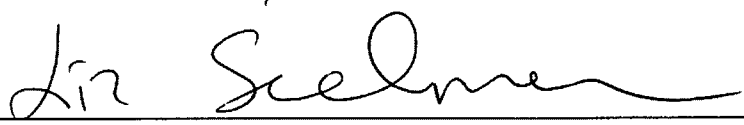

Print Name

MIKE GARCIA
27TH DISTRICT, CALIFORNIA

WASHINGTON, DC OFFICE
144 CANNON HOB
WASHINGTON, DC 20515
(202) 225-1956

HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, & SCIENCE
SUBCOMMITTEE ON DEFENSE
SUBCOMMITTEE ON ENERGY & WATER DEVELOPMENT

HOUSE PERMANENT SELECT COMMITTEE ON INTELLIGENCE
DEFENSE INTELLIGENCE & OVERHEAD ARCHITECTURE SUBCOMMITTEE
NATIONAL SECURITY AGENCY & CYBER SUBCOMMITTEE

HOUSE COMMITTEE ON SCIENCE, SPACE, & TECHNOLOGY
SUBCOMMITTEE ON SPACE & AERONAUTICS

Congress of the United States
U.S. House of Representatives
Washington, DC 20515–0527

April 14, 2023

City of Santa Clarita Planning Commission
Attn: Chair Renee Berlin
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Chair Berlin,

I am writing to you to call to your attention to Shadowbox Studios' proposed soundstage project to be located in Newhall and Placerita. As you know, Santa Clarita benefits greatly from the film industry and the jobs and revenue it brings into the city. The historical connection with this industry is a source of pride in the area and a partnership that should be continued. I am positive that Shadowbox Studios' project will be an important addition to the public good in Santa Clarita and will improve the livelihoods of our constituents.

I urge you to give this proposal your full and fair consideration. Thank you for your attention to this request, and I look forward to continuing to work with you on this important matter.

Mike Garcia
Member of Congress

ANTELOPE VALLEY
1043 WEST AVENUE M4, SUITE A
PALMDALE, CA 93551
(661) 839-0532

SANTA CLARITA VALLEY
27200 TOURNEY ROAD, SUITE 300
SANTA CLARITA, CA 91355
(661) 568-4855

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848 W. LANCASTER BLVD., SUITE 101
LANCASTER, CA 93534
TEL (661) 729-6232
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VICTOR VALLEY DISTRICT OFFICE
14343 CIVIC DRIVE, FIRST FLOOR
VICTORVILLE, CA 92392
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FAX (760) 843-8348

SANTA CLARITA DISTRICT OFFICE
23920 VALENCIA BLVD., SUITE 250
SANTA CLARITA, CA 91355
TEL (661) 286-1471
FAX (661) 286-2543

California State Senate

SENATOR
SCOTT WILK
TWENTY-FIRST SENATE DISTRICT

COMMITTEES
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ENERGY, UTILITIES & COMMUNICATIONS
GOVERNMENTAL ORGANIZATION
JUDICIARY
LABOR, PUBLIC EMPLOYMENT & RETIREMENT

April 13, 2023

City of Santa Clarita Planning Commission
Attn: Chair Renee Berlin
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Chair Berlin,

I am writing to express my support for the proposed Shadowbox Studios project.

Santa Clarita has played a starring role in the entertainment industry as Hollywood's backlot. Santa Clarita's natural landscapes and varied cityscapes have long provided a versatile backdrop for filmmakers. The past several decades have seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the Santa Clarita Valley. Once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production.

In 2022, the City of Santa Clarita experienced an increase in location filming - providing approximately $38.5 million in economic impact to the local economy. The Shadowbox Studios project expects to generate at least 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. In addition, it will provide over $1 billion in annual economic impact.

Demand for soundstage and studio space in the Santa Clarita Valley continues to grow for both major motion pictures and scripted television series. Shadowbox Studios is committed to partnerships with the local film industry to strengthen the film footprint in Santa Clarita and thereby retain productions that would otherwise escape to other Los Angeles filming submarkets.

The Santa Clarita Valley Chamber of Commerce and the Santa Clarita Valley Economic Development Corporation have endorsed the Shadowbox Studios project.

I urge the City's Planning Commission to recommend approval of the Shadowbox Studios project.

Scott Wilk

Senator Scott Wilk
21st Senate District

CAPITOL OFFICE: 1021 O STREET, SUITE 7140 • SACRAMENTO, CA 95814 • TEL (916) 651-4021 • FAX (916) 651-4921
SENATOR.WILK@SEN.CA.GOV

April 17, 2023

City of Santa Clarita Planning Commission
Attn: Chair Renee Berlin
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Chair Berlin,

As a member of the film industry for over 40 years in the Santa Clarita Valley, I am pleased to support the proposed Shadowbox Studios project. My grandfather Paul T. Veluzat was born in 1898. He was the oldest living Texas Ranger, who moved our family to Santa Clarita in the 1940s to run cattle and develop our movie ranch. He passed away in Santa Clarita at 101 years old.

Now, having owned or operated family-owned movie ranches for well over 50 years in the Santa Clarita Valley, I have first-hand experience hearing from top actors, film directors, and producers how much they not only enjoy filming in our City, but spending time throughout our community. I have witnessed the positive impact that it has on our community and residents across Santa Clarita, and Shadowbox Studios will only help compliment already existing filming features our City hosts. Therefore, once simply a home to historic movie ranches, these modern soundstages and thousands of film industry residents have established Santa Clarita as a leading venue for film and television production.

The past several decades has also seen the addition of dozens of certified soundstages, and the migration of countless film industry professionals to the SCV. As a studio owner, I welcome the addition of film studios throughout Santa Clarita. This will allow us to work together and ensure we are never at capacity and turn revenue away from our City, residents, and neighboring business owners.

I am currently working with Shadowbox on our movie ranch – formally known as Veluzat Movie Ranch. During my time working with the Shadowbox team, I have been able to learn the company's values and mission. I've witnessed that their main concern is to ensure our residents and businesses throughout the community are properly served. They are continuously looking to accommodate the needs of our neighbors.

In 2022, the City of Santa Clarita generated an estimated $38.5 million in economic impact to the local community from filming. Many factors have contributed to the continued success and appeal of filming in Santa Clarita, including the City's Film Incentive Program, Movie Ranch Overlay Zone, low-cost permit fees and expedited permit processing, along with the California Film and Television Tax Credit Program.

As one studio is at capacity, we are quick to recommend a neighboring studio, based on what the production is looking for. Our existing filming community welcomes Shadowbox Studios with open arms. Their studio project will bring in what our current infrastructures have less of.

Each one of us in the film community must work together to keep the City of Santa Clarita and its residents at the top of mind for production companies, when scouting for film locations for their next project.

I urge the Planning Commission to recommend approval for this project and allow us to continue to work locally in an industry that is proud to call Santa Clarita home.

Sincerely,

Daniel Andre Veluzat

Daniel Andre Veluzat

BLACK BUSINESS COUNCIL
SANTA CLARITA VALLEY CHAMBER OF COMMERCE®

April 17, 2023

City of Santa Clarita Planning Commission
Attn: Chair Renee Berlin
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Chair Berlin:

The Black Business Council of the Santa Clarita Valley Chamber of Commerce works to inspire, empower, and promote the economic growth and sustainability of black businesses, entrepreneurs, and professionals within the Santa Clarita Valley. The Black Business Council has reviewed this vital economic development project and is in full support of the Shadowbox Studios project.

Shadowbox Studios will help increase the filming footprint for our city and economic opportunities for black-owned businesses within the SCV. As we had read a couple months ago, the City reported 591 film permits were issued and 1,549 location film days in 2022, which generated an estimated $38.5 million in economic impact to the local community.

Santa Clarita is home to several studios and movie ranches that attract a large number of productions to the area. Shadowbox Studios will complement the current infrastructure that our city has and ensure that production continues to return to Santa Clarita.

Filming benefits our local economy, including local black-owned businesses, and this project will bring a much-needed revenue stream to Santa Clarita.

We are asking for your immediate approval of this project.

Sincerely,

Diiehma Thompsn

Di Thompson
2023 Black Business Council Chair
Santa Clarita Valley Chamber of Commerce

From: Erika Iverson
To: Lisa Howe
Subject: Fwd: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 8:18:26 PM

Sent from my iPhone

Begin forwarded message:

From: myvoice@oneclickpolitics.com
Date: April 17, 2023 at 7:20:17 PM PDT
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project
Reply-To: tfcarpentier@gmail.com

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

As President of the Board of Directors for Bridge to Home, I am writing to show our support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will provide economic development and valuable job creation for our City. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Tracey Carpentier
tfcarpentier@gmail.com

29112 Madrid Pl. Castaic, CA 91384

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From: Erika Iverson
To: Lisa Howe
Subject: Fwd: SUPPORT - Shadowbox Studios Project
Date: Monday, April 17, 2023 8:18:33 PM

Sent from my iPhone

Begin forwarded message:

From: myvoice@oneclickpolitics.com
Date: April 17, 2023 at 7:47:16 PM PDT
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project
Reply-To: mikedmonroe83@gmail.com

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final

approval from the City Council and begin construction.

Sincerely,
Mr. Michael Monroe
mikedmonroe83@gmail.com
24907 Magic Mountain Pkwy #1316 Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 8:57:00 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 8:32 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Liz Seelman
liz_del@yahoo.com
26175 Montolla Lane Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 2:37:00 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 2:26 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Becki Robb
brobb@hagroup.com
24035 Mill Valley Road Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 2:37:06 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 2:26 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. James Backer
jbacker@jsbdev.com
27651 Lincoln Place, Suite 260 Santa Clarita, CA 91387 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 2:37:12 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 2:29 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Chris Schrage
chriss@lbwinsurance.com
28055 Smyth Dr Valencia, CA 91355

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 2:37:21 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 2:36 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. John Milburn
john.milburn@yahoo.com
23417 Via Castanet Santa Clarita, CA 91355 Constituent

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From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: Shadowbox Studios Support
Date:	Tuesday, April 18, 2023 3:25:40 PM

From: Calvin D. Hedman <Calvin.Hedman@HPLLP.COM>
Sent: Tuesday, April 18, 2023 2:58 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>; Patrick Leclair <PLECLAIR@santa-clarita.com>
Subject: Shadowbox Studios Support

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Erika,

Please see below my statement of support for the Shadowbox Studios project.

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents.

It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita.

Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage.

For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact.

Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators.

I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Thank you,

Calvin

Calvin D. Hedman
CPA, CM&AA
Managing Partner

Calvin.Hedman@HPLLP.com

Phone: (661) 286-1540
Fax: (661) 287-6336

HEDMAN PARTNERS LLP
Certified Public Accountants

27441 Tourney Road, Suite 200
Valencia, CA 91355

www.HPLLP.com

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Any U.S. tax advice contained in the body of this e-mail or its attachments was not intended or written to be used, and cannot be used, by the recipient for the purpose of avoiding penalties that may be imposed under the Internal Revenue Code or applicable state or local tax law provisions.

From:	Erika Iverson
To:	Lisa Howe
Subject:	FW: SUPPORT - Shadowbox Studios Project
Date:	Tuesday, April 18, 2023 3:26:14 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 3:06 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Ms. Chris Najarro
chris.najarro@btohome.org
23752 Newhall Avenue Newhall, CA 91321

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SANTA CLARITA VALLEY
ECONOMIC DEVELOPMENT CORPORATION

April 17, 2023

City of Santa Clarita Planning Commission
Attn: Chair Renee Berlin
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Chair Berlin,

On behalf of the Santa Clarita Valley Economic Development Corporation (SCVEDC) Board of Directors, I am writing to express our full support of the Shadowbox Studios project. The SCVEDC's mission is to adopt an integrated approach to attracting, retaining, and expanding a diversity of businesses, especially those in key industry clusters. We are a unique private/public partnership representing the united effort of regional industry and government leaders.

The entertainment sector and film making are one of the core business sectors the SCVEDC works with the City to attract to the City to increase the number of good jobs and secure our place as a film-friendly location. A typical production requires a studio with soundstages and ample support space that can accommodate a full cast, crew, and other staff. Shadowbox Studios Santa Clarita will consist of 19 purpose-built, modern soundstages ranging from 15,000 to 40,000 square feet, as well as offer workshops and production offices.

Shadowbox Studios is estimated to generate over 2,000 onsite jobs, approximately 4,000 construction jobs, and over $1 billion in annual economic impact.

Santa Clarita, nicknamed "Hollywood North," offers not only a consummate industry workforce but a significantly minimized burden of production red tape. The Santa Clarita Film Office is known to the film industry for its prompt, friendly and cost-effective service.

As demand for studio space in the SCV continues to grow – for both major motion pictures and scripted television series – Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita and thereby retain productions that would otherwise escape to other Los Angeles filming submarkets.

The SCVEDC Board of Directors urges you to recommend approval for this project and allow Shadowbox Studios to move forward.

Sincerely,

Holly Schroeder, President/CEO
Santa Clarita Valley Economic Development Corporation

From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 3:27:31 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 3:13 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Lance Williams
kbrown@williamshomes.com
24911 Avenue Stanford SANTA CLARITA, CA 91350

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 3:27:50 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 3:23 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

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Sincerely,
Mr. Matt Dierckman
matt.dierckman@colliers.com
28159 Anvil Court Valencia, CA 91354

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 3:49:30 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 3:43 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

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Sincerely,
Ms. Marlee Lauffer
marleelauffer@gmail.com
27742 Briarcliff Pl Valencia, CA 91354-1453

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From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Tuesday, April 18, 2023 3:49:51 PM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 3:46 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Sincerely,
Mr and Mrs Charles and Joanna Sarff
csarff@att.net
19710 May Way Santa Clarita, CA 91351 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Shadow box hearing tonight
Date: Wednesday, April 19, 2023 3:35:27 PM

-----Original Message-----
From: John Paterson <johnpindust@aol.com>
Sent: Tuesday, April 18, 2023 9:00 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Shadow box hearing tonight

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Hello - I spoke briefly this evening in favor of the project. I want to be clear that I live in Placerita Canyon on Oak Orchard and have for over 10 years. I support the project. I do not have business interests in Placerita.
The opponents said no one living in Placerita supported the project and that the supporters were outside the Canyon. Not true.

John Paterson

Sent from my iPhone

From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Wednesday, April 19, 2023 10:35:01 AM

Lisa,
Letters continue to come in. We'll need to continue to log letters as they come in.

Thanks

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, April 19, 2023 9:33 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Dr. Chris Raigosa
christianraigosa@att.net
27107 Tourney Rd Santa Clarita, CA 91355 Constituent

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info@oneclickpolitics.com

From: Erika Iverson
To: Lisa Howe
Subject: FW: Shadowbox Studio
Date: Monday, April 24, 2023 7:42:27 AM

-----Original Message-----
From: Linda Tarnoff <haveahunchranch@aol.com>
Sent: Thursday, April 20, 2023 10:50 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Cc: Jason Crawford <JCRAWFORD@santa-clarita.com>; Patrick Leclair <PLECLAIR@santa-clarita.com>
Subject: Shadowbox Studio

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As this long anticipated proposal comes to the Planning Commission for review, I am writing to express my strong support. In the 21 years I have called Placerita Canyon my home, numerous projects, primarily residential, had been proposed, none of which advanced. I would like to mention that the first project brought to my attention was a proposal for over 1500 apartments which the developer at the time pulled out indicating that a project of that nature was not suitable for our area. I believe that rings true to this day.

Therefore, given the uptick in content creation, television and motion picture filming, when Shadowbox was initially proposed for the project site, I became intrigued by its potential.

No doubt, the project as configured is large with community impacts such as increased traffic which need to be addressed. Then again so would have the 2000 plus multiple unit dwellings that are lurking in the distance. Having met with Shadowbox representatives, I feel comfortable with their ongoing commitment to work with our community to maintain our rural character in their plans, including themed architecture as well as local enhancements such as signage and both bicycle and equestrian trail connectivity.

As Shadowbox proceeds through the planning process, it is my hope that the Planning Commission view this project as an opportunity for entire Santa Clarita while taking into consideration local concerns. At some point, something is going to be built on that long vacant land. Why not it be this studio?

Thank you for your due diligence review and hopefully future recommendation to the City Council for approval.

Sincerely,

Linda Tarnoff
Chair, Placerita Advisory Committee on Trails

Sent from my iPad

From: Erika Iverson
To: Lisa Howe
Subject: FW: SUPPORT - Shadowbox Studios Project
Date: Monday, April 24, 2023 9:31:44 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, April 18, 2023 4:49 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT - Shadowbox Studios Project

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Re: SUPPORT - Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

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Sincerely,
Diane kenney
ladydikenney@yahoo.com
26034 Lucerne ct Valencia, CA 91355

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April 24, 2023

Honorable Members of the Santa Clarita Planning Commission:

Re: Shadowbox Studios

In 1975, I bought my first home in Placerita Canyon at the corner of Aden and Placerita Canyon, and my present home on Placerita Canyon, across from Melody Ranch, in 1986. I was a member of the PCOPA board in the late ’80s, and I feel I was instrumental in stopping a metro link station at the 13th and Railroad and the previous alignment of Dockweiler. I mention this to add some authenticity to my history of Placerita Canyon.

I am strongly in favor of the Showbox Studio development.

The present board members of the PCPOA are a smart, hardworking, and dedicated group of caring individuals. However, as a past board member, I know the board only reflects the opinion of a portion of the residents in the canyon. Whether it be apathy, inconvenience, or simply not feeling overly affected by the current events of the canyon.

The purpose of this letter, after talking with several homeowners who agree with me and who have asked me to convey our feelings to you about the Shadowbox project, is to make you aware of our observations and concerns (which are few).

It is true that any development on this land impacts the residents of Placerita Canyon more than anyone else in the City of Santa Clarita. It is also true that any development impacts everyone living in the city. Some projects would increase housing, while others would create jobs and income for the city. What we all know, as homeowners in Placerita, is this land will not remain vacant. Something will be built. Most undoubtedly something that is much more intrusive to the community by adding more traffic than the Shadowbox project and not being in congruence with the neighborhood or as beneficial to the city.

Unfortunately, Placerita Canyon is not a bucolic neighborhood. It could best be described as rustic. Our entrance goes over railroad tracks, by a 50-year-old strip mall, whose backside is small manufacturing shops and mini storage before

entering a neighborhood composed of a burgeoning college and dormitories, a sports field, trailer park, a mix of eclectic million-dollar homes in the middle and ending through oil fields and refinery, all within two miles.

However, as residents of Placerita Canyon, we love it.

In the face of change, years ago, we even created a Special Standards District (SSD) to help preserve some of the characteristics of our rural community.

Interestingly, of the five major components of the SSD, the Shadowbox Studios project meets those standards, with the exception of preserving and enhancing "the secluded, rural equestrian character of the community." Unfortunately, time itself has eroded this standard. As someone who has lived on Placerita Canyon, across from Melody Ranch, and owns a horse and rides throughout the canyon two to three days a week for the last five years, there are less than 10 homeowners that I know of who now board and ride a horse in the canyon. Even this is a rairity. The concept that this is an "equestrian" community" originated in 1922. In 1952 Gene Autry set aside 10 acres for his movie town Melody Ranch. 70 years later the rural community exists **without** an equestrian lifestyle. Walking and bicycling account for 99% of the daily outdoor activity in the canyon. What does remain is the most important restriction for building homes in Placerita Canyon. It is the minimum ½ acre residential lot size. It sets the tone for the entire canyon. This restriction will remain with the Shadowbox Studios project.

That being said, **as with any project on this site**, there are concerns that must be addressed.

> #1 The bottleneck at 13th Street and Railroad Avenue This is the most important issue. However, note that the project has three emergency exits. There also is a fourth, Placerita Canyon to the east. These gates are open during an emergency or inclement weather.
>
> #2Providing emergency egress to the north. This would be beneficial if it could happen. But if not, it is not necessary for the safety of the residents of Placerita Canyon.
>
> #3 The impact on property values, as compared to shopping or housing projects or a business park, we believe having the Shadowbox Studios would be a much-preferred entrance to the canyon.

We appreciate your efforts to help our neighborhood in its evolution and to remain fluid in allowing Placerita Canyon to continue to represent the Golden Age of life in Newhall and the City of Santa Clarita. And, rest assured, your approval of Shadowbox Studios will continue to preserve the movie-making history of Placerita Canyon.

Sincerely,

Anthony Matthess

21244 Placerita Canyon Rd

Newhall, CA 91321

acmatthess@gmail.com

From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios
Date: Monday, May 8, 2023 7:45:33 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, May 6, 2023 12:19 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Matt Green
mgreen@masters.edu
25306 Via Dia Santa Clarita, CA 91355 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios
Date: Monday, May 8, 2023 7:45:44 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, May 6, 2023 12:50 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Ms. Erika Iverson - City Planner,

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Sincerely,
Bob Dickson
bdickson@masters.edu
21726 Placerita Canyon Rd Santa Clarita, CA 91321-1235 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios
Date: Monday, May 8, 2023 7:45:54 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Saturday, May 6, 2023 7:11 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Peter Shickle
shicklepd@gmail.com
27538 Violin Canyon Rd, Apt 102 Castaic, CA 91384

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios
Date: Monday, May 8, 2023 9:59:24 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, May 8, 2023 9:53 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Kathy Unger
kunger@masters.edu
21726 Placerita Canyon Road Santa Clarita, CA 91321 Constituent

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From: Erika Iverson
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios
Date: Tuesday, May 9, 2023 7:51:21 AM

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 9, 2023 12:09 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Jefferson Henson
jhenson@masters.edu
28215 Lorita Lane Santa Clarita, CA 91350 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:46 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 10, 2023 6:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Brett Thomas
gm.bwva@excelhotelgroup.com
27513 Wayne Mills Pl Valencia, CA 91355

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:47 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 10, 2023 10:13 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Henry Rodriguez
henry@yoursfteam.net
18978 Soledad Canyon Rd Santa Clarita, CA 91351 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:47 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 10, 2023 10:42 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Jennifer Abbott-Aston
jennifer@humanelementcompany.com
24043 Saint Moritz Drive Valencia, CA 91355

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:47 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 10, 2023 11:18 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Karina Winkler
gm.hixva@excelhotelgroup.com
27501 Wayne Mills Place Valencia, CA 91355

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:47 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 10, 2023 11:38 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Sofía Rosales
sofia10roca@outlook.com
Magnolia 835 col. Jacarandas Apodaca, KS 66634

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:48 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 12:12 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Charles Beck
cgaming9000@gmail.com
5171 Victoria Place Westminster, CA 92683

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:48 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 1:35 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Ms. Tamara Gurney
tgurney@missionvalleybank.com
26701 McBean Parkway Santa Clarita, CA 91355 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:48 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 1:59 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Ms. Barbara Myler
barbara@summitwestpr.com
PO Box 55133 Valencia, CA 91381

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:48 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 2:19 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Saige Schupbach
schupbachsa@masters.edu
2700 Deer Creek Drive Parker, CO 80138

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:49 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 2:20 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Casey Cole
colecj@masters.edu
4475 Westview Lane Titusville, FL 32780

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:49 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 2:29 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Cora McClain
coralynnmcclain@gmail.com
830 W Cheyenne Rd Colorado Springs, CO 80906

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:49 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 2:59 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Paul Coleman
colemanpl@masters.edu
1515 W H Bar Ranch Rd Payson, AZ 85541

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:49 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 3:04 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Josiah Patton
josiahpatton2001@gmail.com
23601 Ashwood Pl Valencia, CA 91354

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 7:49 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 6:21 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Todd Kostjuk
tkostjuk@masters.edu
21726 Placerita Cyn Rd Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 1:40 PM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 10:31 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Emma Allred
wolfyplays737@gmail.com
437 Woodland Court, Twin Falls, ID 83301

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 1:40 PM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 10:58 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Emery N King
redneender32@gmail.com
16810 E Crestline Ln. Centennial, CO 80015

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 1:40 PM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 11:46 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Tiffany Timber
toffytimber@gmail.com
26728 Via Colina, Valencia Santa Clarita, CA 91381 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 11, 2023 1:40 PM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Thursday, May 11, 2023 12:08 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Dr. Izuchukwu Okpara
idokpara@omniwoundphysicians.com
28212 Kelly Johnson Parkway Suite 200 Valencia, CA 91355

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Erika Iverson

From: myvoice@oneclickpolitics.com
Sent: Thursday, May 11, 2023 6:14 PM
To: Erika Iverson
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mrs. Erika Kauzlarich-Bird
erikabird@outlook.com
24510 Aden Avenue Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 7:44 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Sunday, May 14, 2023 12:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Roman Latela
romanlatela@gmail.com
27212 Calypso Lane Santa Clarita, CA 91351 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 7:44 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Sunday, May 14, 2023 10:33 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Matthew Brecheen
brecheenml@masters.edu
25645 Dillon Rd. Laguna Hills, CA 92653

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Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 11:33 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, May 15, 2023 11:05 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. John Vance
john.vance@vancewealth.com
26491 Summit Cir Santa Clarita, CA 91350 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Monday, May 15, 2023 11:33 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, May 15, 2023 11:19 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Fred Arnold
fred@fredarnold.com
28015 Smyth Dr Valencia, CA 91355

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May, 15, 2023

Honorable Members of the Santa Clarita Planning Commission:

Re: Shadowbox Studios.

Why is the Shadowbox Studios project in Newhall good for everyone?

1. It will provide hundreds of jobs in the City of Santa Clarita, which reduces the carbon footprint, and traffic.
2. The positive fiscal benefit for the city is sorely needed to continue to provide the community with top-notch services, infrastructure, parks, and be able to hire smart people to do smart things.
3. Job creation benefits all surrounding businesses, thereby increasing jobs and revenue to the city and the subsequent building of additional businesses and service businesses in downtown Newhall (the ripple effect).
4. Shadowbox Studios' obsolescence factor is almost nonexistent, compared to other brick-and-mortar developments (JC Penny, Sears, Macy's, Blockbuster, etc.), thereby not eliminating the revenue flow to the city, and disrupting employment for the community.
5. Compared to high-density multi-family housing (due to it being adjacent to the railroad tracks), this project will impact traffic significantly less (re. cars per day and the staggered ingress and egress times).
6. If a housing project is built the bottleneck at the Placerita gate will be a nightmare because the added residents within the Special Standards District will have access through the gate. Mornings and evenings will be unmanageable, with each car needing to stop to raise the gate).
7. Due to the realization that the "equestrian lifestyle" in the Placerita Canyon is relatively non-existent, Shadowbox Studios adheres to all aspects of the Special Standards District. With this fact, the developers are still planning on providing trails for the community. Interestingly, 30 years ago, Councilperson Weste advocated for riding trails throughout the canyon. As of today, not one trail has been built.

8. Of the fractionally small number (relative to all the homeowners of Placerita Canyon and the 200,000 residents of Santa Clarita), of people representing the residents of the Canyon (the PCOPA), over 50% of them are opposed to any project being built at this location. So what does that leave, three people?
9. The approval of this project, as it stands, should not be withheld or altered for the self-interest of a few people.

Respectfully,

Anthony Matthess

21244 Placerita Canyon Rd

Newhall, Ca 91321

661-816-0663

acmatthess@gmail.com

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:19 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 7:54 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Scott Wenrich
scottwenrich@me.com
24713 Choke Cherry, Lane Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:19 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 7:56 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
LaMarr Wenrich
lamarrwenrich@me.com
24713 choke cherry lane Newhall, CA 91321

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Lisa Howe

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Sent: Tuesday, May 16, 2023 8:19 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 8:05 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Jerry Monroe
jeromedgar@gmail.com
24278 Golden Oak Lane Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:22 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, May 15, 2023 9:05 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Sincerely,
Alan Barber
alanbarberbgi@mac.com
24969 Hacienda Ln Newhall, CA 91321

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From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
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Subject: Approve Shadowbox Studios

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Sincerely,
Alma & Ahmet Kulenovic
almakeric@yahoo.com
24708 choke Cherry ln Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:22 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Monday, May 15, 2023 10:11 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

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Sincerely,
Olga Kaczmar
okaczmar@gmail.com
24979 Alderbrook Dr. newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:22 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 1:53 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Megan Hebdon
meghebdon@gmail.com
24933 Cindy Rd. Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:22 AM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 3:04 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

I am writing to show my utmost support for the Shadowbox Studios project. As a resident of Santa Clarita, this much-need project will elevate our City and build upon its reputation for a live, work, and play city for its residents. It's no secret that Santa Clarita has built the reputation of Hollywood north. Just last year, our City saw an increase in location filming, which generated an estimated $38.5 million in economic impact to the local community. Filming here benefits our local economy. Productions spend several millions of dollars on rentals and goods from businesses, homeowners, and nonprofits. Our local hotels, restaurants, attractions, and shopping centers receive direct compensation and generate tax revenue that helps fund roads, programs, recreation, and public safety for Santa Clarita. Queue in Shadowbox Studios. This studio will meet the growing need for studio space, not just in our City, but in Los Angeles County. Further, as demand for studio space in the SCV continues to grow, Shadowbox Studios is committed to partnering with the local film industry to buttress the film footprint in Santa Clarita. I am pleased to say the studio promises to build on the community's stout filmmaking heritage. For our local economy, the proposed project is estimated to generate over 2,000 onsite jobs, over 5,000 operations jobs, and approximately 4,000 construction jobs. Also, it is slated to have over $1 billion in annual economic impact. Indeed, as Shadowbox Studios Santa Clarita builds on the century-long legacy of SCV film production, the objective would be to help make Santa Clarita a first option for the film content creators. I urge the Planning Commission to recommend approval of this project, so it can receive its final approval from the City Council and begin construction.

Sincerely,
Mr. Jeffrey Thompson
jtmediaone@gmail.com
23249 Cuestport Drive Valencia, CA 91354

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 8:23 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 4:30 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Michele Coombe
michele.coombe@gmail.com
24833 Quigley Canyon Rd Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 10:32 AM
To: Lisa Howe
Subject: FW: Support For Shadowbox Studios

-----Original Message-----
From: Ben Jarvis <ben.jarvis.1967@gmail.com>
Sent: Tuesday, May 16, 2023 10:08 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Support For Shadowbox Studios

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Dear Mrs. Iverson:

We have made our home in Newhall for the past 25 years and support the Shadowbox Studios project that is currently being considered by the Planning Commission. This project would add momentum to Newhall's renaissance and would support the City's investment in the Old Town Newhall area. We fully support the project and hope the Planning Commission will approve it.

Sincerely,

Ben Jarvis
25052 Newhall Avenue
Santa Clarita, CA 91321

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 11:33 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 11:03 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

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Sincerely,
Leesa Veluzat
leesav@icloud.com
24748 Golden Oak Lane Newhall, CA 91321

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Written comment - in favor of proposed Shadowbox project

We have lived in Placerita Canyon since 1987. There has been subtle changes in those years including an extension of Masters University, a private gate installation at one end of Placerita Canyon road, several housing projects such as Town and Country Homes, Palomino estates, bridges that have gone down from running creeks, church traffic, horse facilities and more. Change can be challenging but there are ways to embrace change while keeping a community in-tact.

There has always been a question about the field on 13th street. Besides filling in for Cowboy Poetry parking, there have been proposals for housing tracks that range from townhomes and apartments to communities of single family homes.

I am sure I speak for many in the canyon who would love to see the field stay exactly as it is but knowing deep down that is impossible and not reasonable and not our decision. So what would be good for us - the Placerita Canyon folks?

We believe it would be much better to communicate with one neighbor instead of hundreds and with the history of filming in our town, a sound stage seems to make sense. The Shadowbox project appears to be a good fit for the field if some concessions can be made - specifically to the traffic flow and the entry gates.

We stand with our neighbors and the PCPOA who have done an amazing job keeping residents informed of each stage of this process. We also appreciate the community outreach by Shadowbox and their willingness to improve our community and be good neighbors.

We ask the Planning Commission to help us by keeping the traffic impacts to a minimum and ensure our residents, horses, goats, walkers and children on bikes, remain safe and secure in our special community for years to come.

Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 1:31 PM
To: Lisa Howe
Subject: FW: SUPPORT the Shadowbox Studios Project

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 1:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: SUPPORT the Shadowbox Studios Project

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Re: SUPPORT the Shadowbox Studios Project

Ms. Erika Iverson - City Planner,

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Sincerely,
Michael Grisanti
michael.grisanti@hpllp.com
27441 Tourney Road, Suite 200 Valencia, CA 91355

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 1:31 PM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 1:30 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Sincerely,
Gloria Rodriguez
rodriguezgloriajean@gmail.com
24713 choke cherry lane Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Tuesday, May 16, 2023 5:06 PM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 5:03 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

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Sincerely,
Barbara Blankenship
ranchoblanko@gmail.com
24848 Quigley Canyon Road Santa Clarita, CA 91321 Constituent

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Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 17, 2023 7:53 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 6:34 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Dana Barber
danalbarber@mac.com
24969 Hacienda Lane Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 17, 2023 7:54 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Tuesday, May 16, 2023 7:55 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

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Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Denise Malobabic
malobabic4@aol.com
21110 Placerita Canyon Rd Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Wednesday, May 17, 2023 7:54 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 17, 2023 12:36 AM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Alexis Rasmussen
lexzras@yahoo.com
24633 Aden Ave Newhall, CA 91321

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Lisa Howe

From: Erika Iverson
Sent: Thursday, May 18, 2023 7:44 AM
To: Lisa Howe
Subject: FW: Approve Shadowbox Studios

From: myvoice@oneclickpolitics.com <myvoice@oneclickpolitics.com>
Sent: Wednesday, May 17, 2023 10:46 PM
To: Erika Iverson <EIVERSON@santa-clarita.com>
Subject: Approve Shadowbox Studios

CITY WARNING: This email was sent from an external server. Use caution clicking links or opening attachments.

Re: Approve Shadowbox Studios

Ms. Erika Iverson - City Planner,

As a resident of Placerita Canyon, and a direct neighbor to the proposed Shadowbox Studios project, I am writing to express my support for this project. Throughout the process, the developer has worked side-by-side with our community to ensure our thoughts, comments and questions are heard. Further, it has been great to see some of our ideas implemented in the project throughout the past couple of years. As you have seen from the renderings, our Placerita Canyon Community Characteristics have been incorporated in the project. The stages feature an equestrian aesthetic that honors our lifestyle. I want to see this lifestyle protected and to continue, and that is what Shadowbox Studios has promised to do. I recognize that development on this property will occur at some point. I don't think we want to see thousands of houses or apartments here. That would be a real traffic nightmare. This project is the next best option for our community. Moreover, I applaud the efforts from the developer on working with the City towards a trail extension and access from Placerita to downtown Newhall and Metrolink. The enhancement would be of great significance for our community. Placerita Canyon has a long history of movie ranches and filming from Disney Ranch on the South to Melody Ranch in the middle of Placerita Canyon. This city, and Placerita Canyon, have an abundance of talented people who work in the film industry. How great it would be for these people to be able to regularly work close to their homes and maybe even walk or ride their bikes to the studio. On behalf of my neighbors in Placerita Canyon, I hope the Planning Commission sees this as the best possible project for our community and the City. Please the project and allow it to move on to the next step.

Sincerely,
Dan Blankenship
barbanddanblankenship@yahoo.com
24848 Quigley Canyon Road Newhall, CA 91321

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MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am reaching out to seek information and clarification regarding the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus as a condition of approval. I have several questions that I would greatly appreciate your assistance in addressing:

1. Could you please provide further details on the reasons behind the absence of discussions to date regarding the need for an additional ingress and egress to the Shadowbox Studios campus? What factors were taken into consideration when determining that no such access point was necessary?
2. Has a comprehensive traffic impact analysis been conducted to evaluate the potential effects of the proposed ingress and egress on the surrounding roadways? If so, what were the findings of this analysis, and how were they taken into account during the planning process? Specifically, I would like to inquire about the simulation presented during the May 16th Planning Commission meeting, which demonstrated congestion on Railroad Avenue. How will this issue be addressed? Additionally, what does the simulation depict when a freight train passes (averaging 8 times per day in 2017)?
3. How would the addition of an extra ingress and egress align with the overall transportation infrastructure plan for the Santa Clarita area? Does it seamlessly integrate with existing traffic patterns and roadways, or would it necessitate significant modifications to the surrounding transportation network?
4. What measures are being considered to ensure that any newly established ingress and egress points are designed in a manner that minimizes potential traffic congestion and prioritizes safety for both studio personnel and the general public?
5. Are there any provisions or plans in place to enhance public transportation options to and from the Shadowbox Studios campus, taking into account the potential increase in traffic associated with the project?
6. Has the local community been consulted or involved in the decision-making process regarding the necessity of an additional ingress and egress? If so, what feedback has been received from residents and local businesses, and how has it influenced the considerations of the planning commission?
7. Have alternative solutions or approaches been explored to address the traffic concerns without requiring a new ingress and egress? If so, I would appreciate learning more about these alternatives and the reasons why they were not deemed suitable for the project.
8. Will there be any specific conditions or restrictions imposed on the use of the new ingress and egress points to mitigate potential negative impacts, such as limiting their usage during peak traffic hours or implementing traffic control measures?
9. How will the effectiveness of the new ingress and egress points be monitored and evaluated once they are operational? Are there plans in place to address any unforeseen issues or make necessary adjustments as needed?

Thank you for taking the time to consider and respond to these questions. I am eagerly anticipating your insights and clarification on the proposed Shadowbox Studios project and the potential need for additional ingress and egress requirements.

Sincerely, Frances Zamora

Name: Frances Zamora

Address: 24742 N. Meadview
Newhall, Ca. 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the possibility of a requirement for an additional ingress and egress to the studio campus as a condition of approval. I have several questions regarding this matter and would appreciate answers to be provided:

Could you please elaborate on why there has been no discussion to date requiring an additional ingress and egress to the Shadowbox Studios campus? What factors were considered in determining there was no need for an additional access point?

Has a thorough traffic impact analysis been conducted to assess the potential effects of the proposed ingress and egress on the surrounding roadways? If so, what were the findings of this analysis, and how were they taken into account during the planning process? Specifically, in the simulation shown at the May 16th Planning Commission meeting, backup on Railroad Avenue was evident. How will this be addressed? What does the simulation and backup look like when a freight train (average 8/day in 2017) goes by?

How would an additional ingress and egress align with the overall transportation infrastructure plan for the Santa Clarita area? Does it complement existing traffic patterns and roadways, or does it necessitate significant modifications to the surrounding transportation network?

What measures will be taken to ensure that any new ingress and egress points are designed in a way that minimizes potential traffic congestion and maximizes safety for both studio personnel and the general public?

Will there be any provisions or plans to enhance public transportation options to and from the Shadowbox Studios campus, considering the potential increase in traffic associated with the project?

Has the community been consulted or involved in the decision-making process regarding the need for an additional ingress and egress? If so, what feedback has been received from residents and local businesses, and how has it influenced the planning commission's considerations?

Are there any alternative solutions or approaches that have been explored to address the traffic concerns without a new ingress and egress? If so, what were these alternatives, and why were they not deemed suitable for the project?

Will there be any specific conditions or restrictions imposed on the use of a new ingress and egress points to mitigate potential negative impacts, such as limiting their use during peak traffic hours or implementing traffic control measures?

How will the effectiveness of the new ingress and egress points be monitored and evaluated once they are operational? Will there be any mechanisms in place to address any unforeseen issues or make adjustments if needed?

Thank you for taking the time to consider and respond to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the need for additional ingress and egress requirements.

Sincerely, Maria Zamora

Name: Maria Zamora

Address: 388 Smokeridge Trl.
Calimesa, CA 92320

Grew up in the Canyon, and family still lives in This Canyon.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for at least one additional ingress and egress to the studio campus. I have several questions regarding this matter, particularly regarding the impact on emergency response vehicles, and would appreciate your response:

Has there been any consideration given to the potential impact of traffic delays and increased travel times on emergency response vehicles in the surrounding area? How will the proposed project affect the response times of emergency services?

Will there be any measures in place to ensure that emergency services are not significantly affected by the lack of additional ingress and egress points? Are there plans to provide emergency vehicles with priority access or alternative routes to mitigate potential delays?

Has the planning commission consulted with local fire departments, police departments, and emergency medical services to assess the impact of the proposed ingress and egress on their operations? What feedback or recommendations have been provided by these emergency services regarding the project?

Will the proposed project include any infrastructure improvements or modifications, such as dedicated emergency vehicle lanes or traffic signal preemption systems, to facilitate the smooth flow of emergency vehicles in and out of the studio campus?

Have there been any simulations or studies conducted to evaluate the impact of the proposed ingress and egress on emergency response times? If so, what were the findings of these studies, and how have they been taken into account during the planning process?

Will there be ongoing coordination and communication between the studio campus management and the local emergency services to address any potential issues or concerns that may arise during the operation of the new ingress and egress points?

Are there any plans for emergency preparedness and response training programs to ensure that studio staff and personnel are adequately trained to facilitate emergency vehicle access and support emergency responders in case of an incident?

How will the effectiveness of the measures taken to mitigate the impact on emergency response vehicles be monitored and evaluated? Will there be regular assessments or reviews to address any issues that may arise and make necessary adjustments?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential impact on emergency services.

Sincerely,

Name: Wendy R Zamora

Address: 388 Smoke Ridge Trail, Calimesa CA 92320

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. In relation to this matter, I have several questions, including concerns about labor union strikes and general picketing by unions. I would appreciate your response:

Has there been any consideration given to the potential impact of labor union strikes on the ingress and egress points of the Shadowbox Studios campus? Are there contingency plans in place to address potential disruptions caused by strikes and to ensure the safety and security of all involved parties?

Will there be a designated gate or entrance specifically designated for labor union activities during strikes or other labor-related events? If so, how will this gate be identified and communicated to the labor unions and relevant parties?

Have discussions been held with labor unions or representatives to understand their needs and requirements during strikes? What measures will be in place to facilitate peaceful demonstrations and ensure that ingress and egress for non-striking personnel are not hindered and safe passage for residents?

Will there be security personnel or law enforcement presence to manage and monitor labor union strikes, ensuring that access to the studio campus is maintained for non-striking personnel?

How will communication and coordination be handled between studio management, labor unions, and law enforcement agencies to ensure the safety and smooth operation of the ingress and egress points during labor union activities?

Are there any limitations or conditions that will be imposed on the use of the ingress and egress points during labor union strikes, such as specific hours of operation or alternative access routes for non-striking personnel?

Has there been any analysis or assessment of the potential impact of labor union strikes on traffic flow in the surrounding area? Are there plans in place to minimize disruptions to traffic and mitigate any adverse effects on the local community?

Will there be any monitoring or evaluation mechanisms in place to assess the effectiveness of the designated gate and overall management during labor union strikes? How will feedback and lessons learned from such events be incorporated into future planning and decision-making processes?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project, including any considerations related to labor union strikes and the designated ingress and egress points.

Sincerely,

Name: _____

Address: _____

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. In light of recent labor union strikes in various industries, I have some questions regarding the project's preparedness and planning in such scenarios. I would appreciate your response:

Has there been any consideration given to the potential impact of labor union strikes on the ingress and egress points of the Shadowbox Studios campus? Are there contingency plans in place to address potential disruptions to traffic flow during strikes?

Where will be the designated gate or access point specifically designated for use during labor union strikes or picketing of non union shows? How will this gate be determined, and what measures will be implemented to ensure the safety and security of both striking workers and other individuals accessing the studio campus?

How will the choice of the designated gate during labor union strikes and non union show picketing align with the overall traffic management plan for the Shadowbox Studios project? Will this gate choice aim to minimize disruptions to traffic flow in the surrounding area?

Has the project engaged in discussions or negotiations with labor unions or other relevant stakeholders regarding strike-related access and traffic management? If so, what feedback or agreements have been reached to address these concerns?

Will there be any communication protocols established between the studio management, local authorities, and labor union representatives to facilitate smooth traffic operations and ensure the safety of all individuals in the canyon during labor union strikes?

How will the public be informed about the designated gate and any alternative traffic routes during labor union strikes? Will there be clear signage and communication channels in place to guide drivers and minimize confusion?

Will there be any temporary traffic control measures implemented, such as additional signage, traffic officers, or road closures, during labor union strikes or non union show picketing to ensure the safety and efficiency of traffic flow in the vicinity of the Shadowbox Studios campus?

How will the effectiveness of the traffic management measures during labor union strikes be monitored and evaluated? Will there be mechanisms in place to address any issues that may arise and make necessary adjustments to minimize disruptions?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential need for specific ingress and egress considerations during labor union strikes.

Sincerely,

Name: Jan Chang

Address: 29015 Newhall Ave 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. I have several questions regarding this matter, particularly concerning the impact on emergency response vehicles, and would appreciate your response:

1. Has there been any consideration given to the potential impact of traffic delays and increased travel times on emergency response vehicles in the surrounding area?
2. Are there any studies or assessments conducted to evaluate the potential effects on emergency services? If so, what are the findings?
3. Will there be any measures or provisions in place to ensure that emergency services are not significantly affected by a single point of entry? How will emergency vehicles navigate the area efficiently during times of increased traffic congestion?
4. Have emergency service providers, such as fire departments, paramedics, and law enforcement agencies, been consulted or involved in the planning process to address their concerns and needs related to the proposed ingress and egress requirements? If so, please summarize their input and recommendations.
5. Are there any plans to enhance the infrastructure or implement specialized traffic control measures to facilitate the smooth movement of emergency response vehicles in the vicinity of the Shadowbox Studios campus both in and outside Placerita Canyon?
6. Will emergency service providers have direct communication or coordination with the studio management to address any potential conflicts or issues arising from the increased traffic associated with the project?
7. Has the potential impact on emergency response times been assessed considering the project's additional ingress and egress, if the planning commission requires it as a condition of approval? Are there any benchmarks or standards in place to ensure that emergency services can reach their destinations within a reasonable timeframe?
8. Will there be any training or education programs for studio employees and workers to promote awareness and cooperation in facilitating the passage of emergency vehicles during times of high traffic volume?
9. How will the effectiveness of the measures implemented to mitigate the impact on emergency response vehicles be monitored and evaluated? Will there be regular assessments and feedback from emergency service providers to address any shortcomings or make necessary adjustments?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential need for additional ingress and egress requirements, specifically concerning emergency services.

Sincerely,

Name: Paul Brown

Address: 21515 Placerita Canyon #3 Newhall, CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the established speed limits on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street, as well as the considerations given to equestrian, pedestrian, and golf cart vehicles that share these roadways. I would appreciate your response to the following questions:

What are the established speed limits on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street? Have there been any recent changes or updates to these speed limits, or are they consistent with the current regulations?

What factors were considered in determining the speed limits on these roadways? Were considerations given to the surrounding land use, nearby residential areas, safety concerns, and the presence of equestrian, pedestrian, and golf cart vehicles?

How will the established speed limits be enforced on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street? Are there any plans or initiatives in place to enhance enforcement measures to ensure compliance and maintain safety for all road users?

What specific considerations were given to horses and riders that utilize these roadways? Are there designated equestrian lanes or dedicated areas to accommodate equestrian activities, such as riding trails or designated crossing points?

How will pedestrian safety be ensured on these roadways? Are there designated sidewalks, crosswalks, or pedestrian-friendly features in place to facilitate safe pedestrian movement?

Are there any specific regulations or guidelines pertaining to golf cart vehicles that share these roadways? Are there designated lanes or areas for golf carts, and will there be any restrictions on their usage?

Has there been community input or consultation with local equestrian groups, pedestrian advocacy organizations, and golf cart owners regarding the design and usage of these roadways? What feedback has been received, and how has it influenced the planning commission's considerations?

Will there be ongoing monitoring and evaluation of the roadways' safety and effectiveness, considering the shared use by various types of vehicles? Are there plans for periodic reviews or updates to ensure the continued safety and efficiency of these roadways for all users?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the established speed limits and considerations for equestrian, pedestrian, and golf cart vehicles on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street.

Sincerely,

Name: Nina Zamora

Address: 21233 Placerita Cyn

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. I have a few additional questions regarding labor union strikes and would appreciate your response:

In the event of a labor union strike involving the Shadowbox Studios project, has there been any consideration given to the designation of a specific gate or entrance that would be accessible during the strike period? Will there be a contingency plan in place to ensure that essential services and activities can continue without disruption?

How will the designation of a specific gate or entrance during a labor union strike be determined? Will it be a collaborative decision between the studio management and the labor union involved, or will the planning commission have a role in making this determination?

Will there be any provisions or protocols established to facilitate safe and orderly access to the studio campus during a labor union strike? How will security and crowd management be handled to ensure the well-being of all parties involved?

Has the potential impact of labor union strikes on traffic congestion and public safety in the surrounding area been assessed? Are there any plans or strategies in place to mitigate these potential effects?

Will there be any communication channels established between the studio management, labor unions, and local authorities to ensure the timely and effective dissemination of information during a labor union strike? How will the public be informed of any changes or developments that may affect their travel plans or safety?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential considerations related to labor union strikes.

Sincerely,

Name: Leslie Tasevski (Leslie Tasevski)

Address: 28614 Deer Springs Drive, Saugus, CA 91390

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

Has there been any consideration given to the potential impact of traffic delays and increased travel times on emergency response vehicles in the surrounding areas of Newhall and Placerita Canyon specifically? Will there be any measures in place to ensure that emergency services are not significantly affected by the lack of additional ingress and egress points if not required as a condition of approval?

How will emergency response vehicles, such as ambulances and fire trucks, navigate through the area considering the potential increase in traffic congestion caused by the additional ingress and egress points? Will there be dedicated lanes or alternative routes designated to prioritize their passage and minimize response times?

Has there been coordination with local emergency service providers to assess the potential impact of the proposed project on emergency response times? What are their recommendations or requirements to ensure that emergency services can operate efficiently despite any traffic delays resulting from the new ingress and egress points?

Will there be any preemption or signal prioritization systems implemented at nearby traffic signals to expedite the passage of emergency vehicles? How will the coordination between emergency services and traffic management systems be facilitated to minimize response time delays?

Are there any plans to provide training or awareness programs to emergency service personnel regarding the changes in traffic patterns resulting from the new ingress and egress points? Will there be ongoing communication channels established between the studio and emergency services to address any operational challenges or adapt to evolving traffic conditions?

How will the potential impact on emergency response times be continuously monitored and evaluated once the additional ingress and egress points are operational? Will there be mechanisms in place to address any unforeseen delays or issues that may arise? If so, what are they?

Ensuring the efficient and timely response of emergency services is crucial for public safety, and I appreciate your attention to this matter. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the measures in place to address the potential impact on emergency response vehicles.

Sincerely,

Name: Kayla Thomerson

Address: 22932 13th Street Newhall CA, 9132

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential impact on traffic patterns if the Dockweiler Drive extension is never completed. I have concerns regarding the long-term implications and would appreciate your response to the following questions:

If the Dockweiler Drive extension is not completed, what alternative plans or measures are in place to address the traffic flow and transportation needs in the area, especially considering the anticipated increase in traffic associated with the studio campus and any future developments?

Has there been an assessment of the potential traffic impact on nearby roadways and intersections if the Dockweiler Drive extension remains incomplete? What are the projected implications for traffic congestion and travel times?

Are there any plans to divert traffic to alternative routes or implement traffic control measures to alleviate potential congestion if the Dockweiler Drive extension is not available?

How will the absence of the Dockweiler Drive extension affect the surrounding communities, including residents, businesses, and other stakeholders, in terms of traffic flow, accessibility, and quality of life?

Has there been any consideration given to the potential environmental and social impacts of increased traffic and congestion in the absence of the Dockweiler Drive extension?

Are there any plans or discussions in progress to revisit or reevaluate the feasibility and importance of completing the Dockweiler Drive extension if it is currently stalled or facing delays?

Will there be ongoing monitoring and assessment of the traffic patterns and impacts if the Dockweiler Drive extension is not completed? How will any issues or concerns be addressed in the long term?

Are there any initiatives or strategies in place to promote alternative transportation options, such as public transit or carpooling, to mitigate the potential traffic challenges if the Dockweiler Drive extension is not realized?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential implications for traffic patterns if the Dockweiler Drive extension is never completed.

Sincerely,

Name: Bryan Wilson

Address: 23201 Dalbey Dr. Santa Clarita, CA 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential impact on traffic patterns if the Dockweiler Drive extension is never completed as part of the proposed Shadowbox Studios project. I would appreciate your response to the following questions:

If the Dockweiler Drive extension is not completed, what alternative plans or measures are in place to address the anticipated increase in traffic associated with the studio campus and its operations?

Has there been an assessment conducted to evaluate the potential consequences of not completing the Dockweiler Drive extension on the surrounding roadways and intersections? What are the projected impacts on traffic flow and congestion in the absence of this extension?

How will the existing road network accommodate the additional traffic generated by the studio campus if the Dockweiler Drive extension is not available? Are there any plans to upgrade or modify existing roads to handle the increased traffic volume?

Will there be any measures implemented to mitigate the potential traffic congestion and address any safety concerns that may arise due to the absence of the Dockweiler Drive extension?

Has the impact on nearby residential areas and local businesses been assessed if the Dockweiler Drive extension is not completed? What steps will be taken to minimize disruptions and inconveniences to the community?

Are there any plans to enhance public transportation options to and from the studio campus to reduce the reliance on personal vehicles and alleviate potential traffic congestion resulting from the incomplete Dockweiler Drive extension?

Will there be ongoing monitoring and evaluation of traffic patterns and congestion levels to identify any areas of concern and implement appropriate mitigation strategies if the extension is not completed?

Has the community been consulted or involved in the decision-making process regarding the completion of the Dockweiler Drive extension? What feedback has been received from residents and local businesses regarding the potential impacts on traffic patterns and how has it influenced the planning commission's considerations?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential impact on traffic patterns if the Dockweiler Drive extension is not completed as part of the proposed Shadowbox Studios project.

Sincerely,

Name: Donald LaMarr

Address: 29274 Nield Ct., Santa Clarita CA 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the plan in place for addressing railroad emergencies, such as derailments, accidents, malfunctions, suicides, or other incidents, particularly in the absence of the Dockweiler Drive extension. I would appreciate your response to the following questions:

If a railroad emergency were to occur in the vicinity of the studio campus or the surrounding area, what alternative routes or measures are in place to ensure the safe and efficient movement of emergency response vehicles, personnel, and the general public, especially considering the lack of the Dockweiler Drive extension?

Has there been a comprehensive emergency response plan developed that accounts for potential railroad incidents and their impact on traffic flow and accessibility without the availability of the Dockweiler Drive extension?

Will there be designated alternative access points or routes identified for emergency response vehicles to reach the affected areas in a timely manner during a railroad emergency?

Are there any contingency plans or traffic control measures established to redirect traffic and mitigate potential congestion on nearby roadways if the normal routes are affected by a railroad emergency?

How will the coordination and communication between emergency response agencies, law enforcement, and the studio management be ensured during a railroad emergency, considering the potential challenges in accessing and managing traffic flow without the Dockweiler Drive extension?

Has the potential impact on nearby residential areas and local businesses during a railroad emergency been assessed? What steps will be taken to minimize disruptions and ensure the safety of the affected community members?

Are there any plans to enhance public awareness and preparedness regarding railroad emergencies, including the dissemination of information on alternate routes, safety precautions, and evacuation procedures, in the absence of the Dockweiler Drive extension?

Will there be regular drills, exercises, or training sessions conducted involving emergency response agencies to test and evaluate the effectiveness of the emergency response plan without relying on the Dockweiler Drive extension?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the plan in place for addressing railroad emergencies without the Dockweiler Drive extension.

Sincerely,

Name: Shannon O'Brien

Address: 28048 Memory Lane Valencia 91354

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential impact of commencing the construction of the Shadowbox Studios project without first completing the Dockweiler Drive extension. I have some concerns regarding the transportation infrastructure and the overall feasibility of the project, and I would appreciate your response to the following questions:

If the Dockweiler Drive extension is not completed prior to the commencement of the studio construction, what alternative routes or access points will be available for construction traffic and future studio operations? Will there be any temporary measures or contingency plans in place to ensure efficient traffic flow during this period?

How will the absence of the Dockweiler Drive extension impact the overall transportation plan for the project? Has there been an assessment of the potential challenges and constraints that may arise due to the delayed completion of this extension?

Will the studio construction and subsequent operations have any adverse effects on the surrounding roadways, considering the absence of the Dockweiler Drive extension? Are there any provisions or mitigations in place to minimize any potential traffic congestion or disruptions?

Has there been any coordination or communication with local authorities and transportation agencies to address the potential traffic impact and find alternative solutions if the Dockweiler Drive extension is not completed as planned?

What are the projected timelines for the completion of the Dockweiler Drive extension? Are there any indications or assurances that this extension will be finished within a reasonable timeframe to align with the construction and operation of the Shadowbox Studios project?

Will there be any measures or requirements imposed on the studio construction to minimize the impact on the existing transportation network and ensure the safety of residents and commuters in the area, considering a delayed completion of the Dockweiler Drive extension?

How will the potential delays in completing the Dockweiler Drive extension be communicated to the public and stakeholders? Will there be regular updates and transparency regarding the progress of this extension and its impact on the studio project?

Has there been any evaluation or contingency plans considered in case the completion of the Dockweiler Drive extension faces significant delays or unforeseen challenges? How will any potential setbacks be addressed to minimize disruptions to the studio construction and operation?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential impact of not completing the Dockweiler Drive extension prior to the commencement of the Shadowbox Studios project.

Sincerely,

Name: Nancy Rendon

Address: 19808 Larbert St Santa Clarita CA 91351

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. I have some concerns regarding the safety and well-being of the residents of Placerita Canyon, as well as their horses, livestock, and pets, specifically in the context of evacuation during emergency situations. I would appreciate your response to the following questions:

1. Has there been adequate consideration given to the evacuation needs of the residents of Placerita Canyon in the event of an emergency, such as wildfires or natural disasters? Are there established evacuation plans that address the safe and efficient movement of people and their animals out of the area?
2. How could additional ingress and egress points facilitate the evacuation process for the residents of Placerita Canyon? Will there be designated evacuation routes or plans in place to ensure their safe and timely exit from the area?
3. Will there be any specific measures or infrastructure enhancements to accommodate the evacuation of horses, livestock, and pets belonging to the residents of Placerita Canyon during emergency situations?
4. Has the capacity of the proposed evacuation routes been assessed to determine if they can handle the potential increase in traffic volume during an evacuation? Will there be any traffic control measures or coordination with law enforcement agencies to prioritize the safe and swift evacuation of residents?
5. Are there any plans for public awareness campaigns or educational programs to inform residents of Placerita Canyon about evacuation procedures, particularly in relation to the studio's only ingress and egress point? How will the community be kept informed and prepared for emergency situations?
6. Will there be any temporary sheltering or assistance provided for horses, livestock, and pets during the evacuation process? Are there designated facilities or resources in place to accommodate their needs and ensure their safety during an emergency?
7. Has there been any coordination with local animal welfare organizations or emergency response agencies to develop comprehensive plans for the evacuation and care of animals in Placerita Canyon during emergency situations?
8. How will the effectiveness of the evacuation plans and provisions for residents, horses, livestock, and pets be monitored and evaluated? Will there be opportunities for community feedback and input to address any concerns or areas for improvement?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the considerations for the residents of Placerita Canyon, as well as the safety of their horses, livestock, and pets during evacuation emergencies.

Sincerely,

Name: Sonia Martinez

Address: 25015 Newhall Ave Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the Dockweiler Drive extension. I have a concern regarding the potential scenario where the construction for both the extension and the studio campus takes place concurrently. I would appreciate your response to the following questions regarding the traffic plan in such a situation:

If the construction for the Dockweiler Drive extension and the studio campus occurs simultaneously, what is the traffic plan to manage the increased construction-related traffic in the area?

Has there been an assessment of the potential impact of concurrent construction on the surrounding roadways and traffic flow? Are there any measures or adjustments planned to minimize congestion and ensure smooth traffic movement?

Will there be designated construction vehicle routes and access points to the studio campus to separate construction traffic from regular commuter traffic?

Are there any plans to implement temporary traffic control measures, such as signage, flaggers, or traffic signals, to regulate the flow of construction-related vehicles and ensure safety for both workers and the general public?

Has there been coordination with local authorities, including law enforcement agencies and transportation departments, to develop and implement the traffic plan for concurrent construction activities?

Will there be regular communication and updates provided to the community and stakeholders regarding the traffic plan during concurrent construction? How will residents and businesses in the surrounding area be informed about any potential disruptions or changes to traffic patterns?

Are there any provisions in place to address any unforeseen issues or challenges that may arise during the concurrent construction, such as adjustments to the traffic plan or additional resources allocated to manage traffic flow?

How will the effectiveness of the traffic plan during concurrent construction be monitored and evaluated? Will there be mechanisms in place to address any concerns or feedback from the community or construction stakeholders?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the traffic plan in the event of concurrent construction for the Dockweiler Drive extension and the studio campus.

Sincerely,

Name: Tatiana Felix

Address: 23361 Happy Valley Drive
Newhall, CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the status of the Dockweiler Drive extension. I have a concern regarding the potential scenario where the extension is not completed prior to the commencement of studio construction. I would appreciate your response to the following questions:

What is the current status of the Dockweiler Drive extension project? Has construction started, or are there any delays or challenges that could potentially impede its completion before the studio construction begins?

If the Dockweiler Drive extension is not completed prior to the start of studio construction, what alternative plans or measures are in place to address the potential increase in traffic and transportation needs during the construction phase?

How will the absence of the Dockweiler Drive extension impact the overall traffic flow in the area, considering the anticipated influx of construction-related vehicles and personnel to the studio site?

Are there any contingency plans or alternative routes that can be utilized if the Dockweiler Drive extension is not available during the studio construction? Specifically, what are the alternative access points or roads that will be designated for construction-related traffic?

Will there be any temporary traffic control measures or adjustments to existing roadways to accommodate the construction traffic if the Dockweiler Drive extension is not yet accessible?

Has the potential impact on nearby residential areas and local businesses been assessed if the Dockweiler Drive extension is not completed prior to the studio construction? What steps will be taken to minimize disruptions and inconveniences to the community?

Will there be ongoing coordination and communication between the construction management team and local authorities to address any traffic-related concerns or issues that may arise during the construction phase?

How will the completion of the Dockweiler Drive extension be prioritized to ensure its availability prior to the start of studio grading and construction? Are there any plans or actions in place to expedite its construction if delays occur?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential impact of an incomplete Dockweiler Drive extension prior to the commencement of studio construction.

Sincerely,

Name: Monica Ludlow

Address: 25481 Langston Street, Valencia, CA

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the status of the Dockweiler Drive extension. Specifically, I would like to understand the implications if the extension is not completed prior to the commencement of the studio construction. Please provide information regarding the following:

What is the current status of the Dockweiler Drive extension project? Has construction begun, or are there any delays or challenges that may prevent its completion before the start of the studio construction?

If the Dockweiler Drive extension is not completed prior to the commencement of the studio construction, what alternative plans or measures are in place to mitigate the potential impact on traffic flow, congestion, and accessibility to the proposed studio site and to Placerita Canyon?

How could the potential absence of the Dockweiler Drive extension affect the ingress and egress of construction vehicles, equipment, and personnel to the Shadowbox Studios site? Are there contingency plans to ensure their safe and efficient movement during the construction phase?

Has a traffic management plan been developed in the event that the Dockweiler Drive extension is not available during the studio construction? How will traffic congestion and disruption be minimized in the surrounding area?

What communication strategies will be employed to keep the community informed about any changes or adjustments related to the Dockweiler Drive extension and its impact on traffic patterns and access during the studio construction?

Will there be any temporary measures, such as the provision of alternative access routes or the use of temporary traffic control devices, if the Dockweiler Drive extension is not completed? How will these measures be implemented and monitored to ensure their effectiveness?

Has the potential delay in completing the Dockweiler Drive extension been considered in the overall project timeline for the Shadowbox Studios? Will there be any adjustments made to the construction schedule to account for this potential delay?

What steps are being taken to expedite the completion of the Dockweiler Drive extension to ensure it is available before the studio construction begins? Are there any coordination efforts with relevant agencies or stakeholders to overcome any challenges and ensure timely completion?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential implications of the Dockweiler Drive extension not being completed prior to the commencement of the studio construction.

Sincerely,

Name: Ryne Crawford

Address: 28926 Pacific Ct. Santa Clarita, CA 91390

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the traffic plan in the event that the construction of the Dockweiler Drive extension and the studio campus are done concurrently. I would appreciate your response to the following questions:

If the construction of the Dockweiler Drive extension and the studio campus were to occur concurrently, what specific measures or plans are in place to manage the resulting increase in construction-related traffic and potential traffic congestion in the surrounding area?

Has there been a comprehensive traffic management plan developed to address the simultaneous construction activities? What strategies will be implemented to ensure the smooth flow of traffic and minimize disruptions to the surrounding roadways?

Will there be designated construction entrances and exits separate from the regular access points for the studio campus to ensure the efficient movement of construction vehicles and personnel?

How will the safety of both construction workers and the general public be ensured during this concurrent construction period? Are there any traffic control measures or signage planned to alert drivers to the construction activities and ensure their safety?

Have traffic impact assessments been conducted to evaluate the potential effects of concurrent construction on nearby intersections, roadways, and surrounding communities? How will the findings of these assessments inform the development and implementation of the traffic management plan?

Will there be regular communication and coordination between the construction management team, the studio operators, and local authorities to address any traffic-related issues or concerns that may arise during the concurrent construction period?

Are there any specific provisions or plans to enhance public transportation options during this period to reduce the number of vehicles on the road and alleviate potential congestion associated with the construction activities?

How will the effectiveness of the traffic management plan be monitored and evaluated during the concurrent construction period? Will there be mechanisms in place to address any unforeseen issues or make necessary adjustments to ensure the smooth flow of traffic?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the traffic plan in the event that the construction of the Dockweiler Drive extension and the studio campus is done concurrently.

Sincerely,

Name: Karen Cowell

Address: 23645 Via Primero, Valencia, CA 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential impact of increased commuter train frequency once the double tracking is installed in the area. I am interested in understanding the implications of this change and would appreciate your response to the following questions:

With the implementation of double tracking, what is the projected increase in commuter train frequency compared to the current schedule? Will there be a significant rise in the number of trains passing through the area on a daily basis?

Has there been a comprehensive assessment conducted to evaluate the potential impact of increased commuter train frequency on the surrounding roadways, intersections, and traffic flow? What are the projected implications for traffic congestion, travel times, and overall transportation efficiency?

Will the increased commuter train frequency require any modifications or enhancements to the existing transportation infrastructure, such as additional railway crossings, signal systems, or other safety measures, to accommodate the higher volume of train traffic?

Have there been any studies conducted to assess the potential noise and vibration effects resulting from the increased commuter train frequency on nearby residential areas? How will any identified impacts be mitigated or addressed to minimize disturbances to the community?

Will the increased frequency of commuter trains have any implications for the accessibility and safety of pedestrians, cyclists, and other non-motorized transportation users in the vicinity of railway crossings? Are there plans to enhance safety measures or implement any changes to accommodate these modes of transportation?

How will the increased commuter train frequency be communicated to the public to ensure awareness and preparedness, especially for those who utilize nearby roadways and intersections? Will there be initiatives to educate the community on train schedules, potential delays, and any changes in transportation patterns?

Has there been coordination and consultation with local transportation authorities, law enforcement agencies, and other relevant stakeholders to address any concerns or challenges related to the increased commuter train frequency?

Will there be ongoing monitoring and evaluation of the impacts of the increased commuter train frequency once the double tracking is implemented? How will any identified issues be addressed or mitigated as needed?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential impact of increased commuter train frequency once the double tracking is installed.

Sincerely,

Name: Lisa Schindewolf

Address: 26080 Viento Ct, Valencia CA 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the impact of the increased frequency of commuter trains once the double tracking is installed in the area. I would appreciate your response to the following questions:

With the implementation of double tracking, what is the anticipated increase in the frequency of commuter trains passing through the area?

Has a comprehensive analysis been conducted to assess the potential impact of the increased frequency of commuter trains on local road traffic, specifically at railway crossings and intersections?

What measures or plans are in place to address any potential disruptions or delays to road traffic caused by the increased frequency of trains?

Will there be any modifications or enhancements made to railway crossings or intersections to accommodate the increased train frequency and ensure the safe and efficient movement of both vehicular and pedestrian traffic?

Has the impact on nearby residential areas, businesses, and community facilities been evaluated in terms of noise, vibrations, and any other potential disturbances resulting from the increased frequency of commuter trains?

Will there be ongoing monitoring of the train operations and their impact on traffic patterns to identify and address any unforeseen issues that may arise after the double tracking is completed?

Are there any plans to improve public awareness and education regarding the increased train frequency, including information on safety precautions, railway crossing procedures, and potential changes to travel times?

How will the double tracking and increased frequency of commuter trains align with the overall transportation infrastructure plan for the Santa Clarita area? Does it complement existing transit systems and contribute to the improvement of regional connectivity?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the impact of the increased frequency of commuter trains once the double tracking is installed.

Sincerely,

Name: Zack Schranz

Address: 26090 Coronado Ct Valencia 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential impact on traffic patterns if the Dockweiler Drive extension is never completed. I have concerns regarding the long-term effects on the transportation infrastructure and the surrounding community. I would appreciate your response to the following questions:

If the Dockweiler Drive extension is never completed (or not within a reasonable timeframe prior to studio operation), what alternative plans or measures are in place to address the anticipated increase in traffic volume resulting from the operation of the studio campus?

Has there been an assessment of the potential traffic impact in the absence of the Dockweiler Drive extension? Are there any projections or studies that provide insights into the potential congestion, road capacity, and overall traffic flow without the extension?

How will the absence of the Dockweiler Drive extension impact the existing traffic patterns and roadways in the surrounding area, considering the projected influx of vehicles associated with the studio campus and related activities?

Have there been any discussions or plans to implement alternative transportation solutions, such as additional public transportation options or enhancements, to mitigate the potential increase in traffic congestion?

Will there be any road improvements or modifications to existing infrastructure if the Dockweiler Drive extension is not completed? Are there any plans to optimize the existing road network to accommodate the anticipated traffic demands?

Has there been consideration given to potential residential areas and local businesses affected by increased traffic without the Dockweiler Drive extension? What steps will be taken to minimize disruptions and address the concerns of the community?

Will there be ongoing monitoring and evaluation of the traffic conditions and patterns in the absence of the Dockweiler Drive extension? Are there mechanisms in place to address any unforeseen issues or make necessary adjustments to optimize traffic flow and ensure the safety of commuters?

How will the absence of the Dockweiler Drive extension impact the overall accessibility and connectivity of the studio campus to the surrounding areas, including neighboring communities and transportation hubs?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential impact on traffic patterns if the Dockweiler Drive extension is never completed.

Sincerely,

Name: Isaac Zamora

Address: 21233 Placerita Cyn Rd

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the proposed Shadowbox Studios. Such an entrance could potentially alleviate congestion at the Arch and 13th intersection by redirecting approximately 1,100 vehicles on a daily basis. I would like to know if this option is currently being considered, and if not, I kindly request the Planning Commission's attention to this matter. Please provide clarification on the following:

Has there been any evaluation or consideration given to the feasibility of creating a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios? This alternative entrance could help alleviate traffic congestion at the Arch and 13th intersection by redirecting a significant number of vehicles.

What factors have been taken into account when determining whether to implement a secondary entrance from Circle J? Are there any specific challenges or limitations associated with this option that have been identified during the planning process?

If the secondary entrance from Circle J has not been considered thus far, would the Planning Commission be willing to evaluate this option now? Given the potential benefits in terms of traffic mitigation, would the Commission be open to exploring the feasibility and impact of a secondary entrance as an alternative solution?

How would the implementation of a secondary entrance from Circle J affect the overall transportation infrastructure plan for the Santa Clarita area? Are there any anticipated benefits or drawbacks in terms of traffic flow, road capacity, or impact on adjacent neighborhoods that need to be considered?

If the secondary entrance from Circle J is deemed feasible and desirable, what steps would be taken to ensure its safe and efficient implementation? Are there any provisions or conditions that would need to be put in place to address any potential challenges or concerns related to the new entrance?

I appreciate your attention to these questions. Clarifying the feasibility and potential consideration of a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios project will provide valuable insights into the efforts being made to address traffic congestion and improve transportation infrastructure in the Santa Clarita area.

Thank you for your time and consideration.

Sincerely,

Name: E. Caballero

Address: 24413 Leonard Tree Ln. #204

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to ask about the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the proposed Shadowbox Studios project. This potential alternative access point could alleviate congestion and reduce the number of vehicles using the Arch and 13th intersection by diverting approximately 1,100 vehicles. I kindly request your insights and clarification regarding the consideration of this option:

Has the feasibility of a secondary entrance from Circle J for the north parking lot been evaluated as a potential solution to alleviate congestion at the Arch and 13th intersection? If so, what were the main considerations and findings of this evaluation? If not, would the planning commission be open to considering this option now?

Are there any specific challenges or constraints that would hinder the establishment of a secondary entrance from Circle J? Factors such as land availability, infrastructure requirements, zoning regulations, and the overall impact on the surrounding area need to be taken into account.

Access to Circle J would not necessitate traversing an active rail crossing? Has the PUC been contacted that this would be an option to minimize vehicular accidents involving the tracks?

What level of coordination and collaboration has taken place between the project developers, transportation experts, and the planning commission to explore alternative access options and evaluate their feasibility? Has the potential for a secondary entrance from Circle J been discussed in previous meetings or planning stages? If not, could it be added as a condition of approval?

If a secondary entrance from Circle J is deemed feasible, what measures would be taken to ensure its safe and efficient operation? How would the traffic flow be managed, and what impact would it have on the surrounding road network and nearby residential areas?

Has the community been consulted or involved in discussions regarding the potential for a secondary entrance from Circle J? Many residents from Circle J have spoken in favor of the studio project, so there is support already in place. Have there been any public forums or consultations to gather feedback and assess the level of support from residents and other stakeholders?

Considering the potential benefits in terms of traffic reduction and improved intersection functionality, I believe it is crucial to explore all viable options for mitigating congestion. I appreciate your attention to this matter and look forward to your insights and clarification on the feasibility of a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios project.

Sincerely,

Name: Isiah Marick

Address: 24413 Leonard Tree Ln. #204

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the possibility of the planning commission adopting Alternative #3 with modifications to address the inclusion of at least one additional ingress/egress gate that does not feed into Placerita Canyon. I would appreciate your insights and response to the following questions:

What specific modifications are being considered for Alternative #3 to accommodate the inclusion of an additional ingress/egress gate that does not rely on Placerita Canyon? How would these modifications ensure efficient traffic flow, minimize impacts on Placerita Canyon, and enhance accessibility to the studio campus?

How would the location of the additional ingress/egress gate be determined? What factors, such as proximity to major roadways, existing infrastructure, and potential impacts on surrounding neighborhoods, would be taken into account when selecting the suitable location?

Has a thorough analysis been conducted to assess the potential traffic impacts and benefits of including an additional ingress/egress gate that does not rely on Placerita Canyon? What were the findings of this analysis, particularly in terms of traffic distribution, congestion mitigation, and overall transportation efficiency?

How would the inclusion of an additional ingress/egress gate align with the existing transportation infrastructure plan for the Santa Clarita area? Would it complement the current traffic patterns and roadways, or would it necessitate significant modifications or enhancements to the surrounding transportation network?

In considering the modification to Alternative #3, what measures will be taken to ensure that the design and operation of the additional ingress/egress gate prioritize the safety of both studio personnel and the general public? Will traffic control measures, signage, and appropriate infrastructure be implemented to minimize potential traffic congestion and maximize safety?

Has the community been consulted or involved in the decision-making process regarding the inclusion of an additional ingress/egress gate? If so, what feedback has been received from residents and local businesses, and how has it influenced the planning commission's considerations?

Are there any alternative solutions or approaches that have been explored to address the need for an additional ingress/egress gate? If so, what were these alternatives, and why were they not deemed suitable for the project?

How would the effectiveness and impact of the modifications, including the additional ingress/egress gate, be monitored and evaluated once implemented? Will there be mechanisms in place to address any unforeseen issues or make adjustments if needed?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the possibility of adopting Alternative #3 with modifications to address at least one additional ingress/egress gate that does not feed into Placerita Canyon.

Sincerely,

Name: Jacqueline Hernandez

Address: 13415 Eustace st Pacoima, CA 91331

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the possibility of the planning commission adopting Alternative #3 with modifications that address the inclusion of at least one additional ingress/egress gate that does not feed into Placerita Canyon. I would appreciate your insights and response to the following questions:

What specific modifications are being considered to Alternative #3 to accommodate the inclusion of an additional ingress/egress gate that does not rely on Placerita Canyon? How would these modifications address concerns related to traffic flow, community access, and potential impacts on Placerita Canyon's residential area?

How would the planning commission ensure that the proposed additional ingress/egress gate is strategically located and designed to minimize potential traffic congestion and maximize safety for both studio personnel and the surrounding community? What factors, such as proximity to major roadways or existing transportation infrastructure, would be taken into account during the selection process?

Has there been any consideration given to the potential impacts of the additional ingress/egress gate on the surrounding road network, including the capacity and efficiency of adjacent intersections or road segments? Will there be an additional comprehensive traffic impact analysis conducted to assess the effects and determine any necessary mitigation measures?

How would the inclusion of an additional ingress/egress gate that does not feed into Placerita Canyon align with the overall transportation infrastructure plan for the Santa Clarita area? Would it complement existing traffic patterns and roadways, or would it necessitate significant modifications to the surrounding transportation network?

What measures would be implemented to ensure that the additional ingress/egress gate is adequately integrated into the studio's transportation management plan, including provisions for traffic control, emergency access, and the efficient movement of vehicles during peak periods?

Has the community been consulted or involved in the decision-making process regarding the inclusion of an additional ingress/egress gate? If so, what feedback has been received from residents and local businesses, and how has it influenced the planning commission's considerations?

How would the effectiveness and impact of the modified Alternative #3, including the additional ingress/egress gate, be monitored and evaluated once implemented? Will there be mechanisms in place to address any unforeseen issues or make adjustments if needed?

I appreciate your attention to these questions and your efforts to consider modifications to Alternative #3 that would address the inclusion of at least one additional ingress/egress gate outside of Placerita Canyon. Thank you for your commitment to addressing traffic concerns and ensuring the safety and well-being of the surrounding community.

Sincerely,

Name: Marilyn Manley

Address: 24921 Ironwood Dr

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the potential requirement for the studio project to make a cash donation to the Placerita Canyon Property Owners Association (PCPOA) as a condition of approval, with the intention of furthering preservation efforts within the canyon. I appreciate your response to the following question:

Has there been any consideration given to requiring the studio project to make a cash donation to the Placerita Canyon Property Owners Association (PCPOA) as a condition of approval? If so, I would like to understand the specific factors and considerations that would be taken into account when determining the amount of the donation and how it would be utilized to benefit the preservation efforts within the canyon.

a) How would the amount of the cash donation be determined? Would it be based on a percentage of the project's budget, a fixed amount, or other criteria? What mechanisms or methodologies would be employed to ensure a fair and appropriate contribution from the studio project?

b) What specific preservation initiatives or projects would be supported by the cash donation? Would the funds be directed towards protecting and enhancing the natural, environmental, and cultural resources within Placerita Canyon?

c) How would the Placerita Canyon Property Owners Association (PCPOA) be involved in the decision-making process regarding the allocation and utilization of the cash donation? Would there be transparency and accountability measures in place to ensure that the funds are used effectively and in alignment with the goals of the PCPOA and the broader community?

d) Would there be any provisions or agreements in place to monitor and evaluate the impact of the cash donation on the preservation efforts within Placerita Canyon? How would the success and effectiveness of the initiatives funded by the donation be assessed and reported?

e) In the event that the studio project expands or undergoes modifications in the future, would there be a possibility for the cash donation requirement to be reevaluated or adjusted to reflect the increased scope and impact of the project on the canyon and its preservation needs?

I appreciate your attention to these questions and the opportunity to gain further insights into the potential requirement for a cash donation to the Placerita Canyon Property Owners Association as a condition of approval for the studio project. Thank you for your efforts to balance development with the preservation of this cherished natural and historic resource.

Sincerely,

Name: Susan Villanueva

Address: 22658 Avenida Santa Clarita 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further discuss the possibility of considering a double lane roundabout as a potential compromise solution for the intersection of Dockweiler Drive, Arch Street, and 12th Street, taking into account the fact that the city of Santa Clarita has not yet adopted a standard for roundabouts. I would appreciate your insights and response to the following questions:

1. Considering the unique circumstances and absence of a roundabout standard, what specific considerations would need to be taken into account when evaluating the feasibility and potential benefits of a double lane roundabout at the intersection of Dockweiler Drive, Arch Street, and 12th Street? How would factors such as traffic flow, safety, road capacity, and community preferences be balanced in the decision-making process?
2. Are there any existing examples or precedents of double lane roundabouts in neighboring jurisdictions that could serve as a reference for evaluating their suitability and effectiveness? What insights could be gained from studying the experiences and outcomes of similar double lane roundabouts in terms of traffic management, safety improvements, and overall satisfaction?
3. In light of the specific characteristics and needs of the intersection at Dockweiler Drive, Arch Street, and 12th Street, what advantages might a double lane roundabout offer over alternative solutions, such as signalized intersections or other intersection designs? How would the inclusion of an additional lane address concerns related to traffic congestion, efficient movement of vehicles, and potential future growth in the area?
4. What potential challenges or limitations might arise in implementing a double lane roundabout at this particular location? Are there any constraints, such as land availability, right-of-way considerations, or existing infrastructure, that would need to be carefully evaluated and addressed to ensure a successful implementation?
5. Given the potential introduction of a new intersection design concept, how would the public and road users be educated and informed about the safe usage and proper navigation of a double lane roundabout? What strategies or initiatives could be employed to ensure widespread awareness and understanding of double lane roundabout rules, yielding protocols, and pedestrian/cyclist considerations?
6. To thoroughly assess the feasibility and impacts of a double lane roundabout, what additional studies, evaluations, or expert consultations might be necessary? How would community input and stakeholder feedback be incorporated into the decision-making process, considering the importance of balancing the interests of residents and the studio?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the feasibility and potential considerations of a double lane roundabout as a compromise solution for the intersection of Dockweiler Drive, Arch Street, and 12th Street, given the absence of a roundabout standard in the city of Santa Clarita.

Sincerely,

Name: Rose Morelli

Address: 27068 Alabaster Dr.
Valencia, CA 91354

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the proposed Shadowbox Studios project. Additionally, I would like to explore the potential for incorporating the flyover Via Princessa bridge into the transportation infrastructure plan. This combination of solutions could help alleviate traffic congestion at the Arch and 13th intersection and provide improved access to the studio campus. I kindly request your insights and clarification on the following matters:

Has there been any comprehensive assessment or consideration given to the feasibility of a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios project, in conjunction with a flyover Via Princessa bridge? This combination could effectively divert approximately 1,100 vehicles from the Arch and 13th intersection and improve traffic flow in the Placerita Canyon area.

What are the potential benefits and challenges associated with establishing a secondary entrance from Circle J and incorporating a flyover Via Princessa bridge? Are there any specific technical, engineering, or regulatory factors that need to be taken into account during the planning and implementation stages?

Have traffic impact studies or assessments been conducted to evaluate the potential effects of diverting traffic through a secondary entrance from Circle J and the integration of a flyover Via Princessa bridge? If so, what were the findings of these studies, and how were they considered in the planning process? If not, will it be done prior to approval?

How would the establishment of a secondary entrance from Circle J and the inclusion of a flyover Via Princessa bridge align with the broader transportation infrastructure plan for the Santa Clarita area? Would these solutions complement existing traffic patterns and roadways, or would they necessitate significant modifications to the surrounding transportation network?

Are there any alternative proposals or potential solutions that have been evaluated to address the traffic concerns at the Arch and 13th intersection, considering the establishment of a secondary entrance from Circle J and the integration of a flyover Via Princessa bridge? What were the main considerations and reasons for either pursuing or not pursuing those alternatives?

What level of coordination and collaboration is taking place between the relevant stakeholders, such as the City of Santa Clarita, transportation authorities, and the planning commission, to explore and evaluate the feasibility of a secondary entrance from Circle J and a flyover Via Princessa bridge?

If these solutions are not currently being considered, would the planning commission be open to reevaluating the options in light of their potential to alleviate traffic congestion, enhance traffic flow, and provide improved access to the Shadowbox Studios project?

Thank you for your attention to these expanded questions. Your insights and clarification regarding the feasibility of a secondary entrance from Circle J, in conjunction with a flyover Via Princessa bridge, will provide valuable information for addressing traffic concerns and enhancing transportation infrastructure in the Santa Clarita area.

Sincerely,

Name: Liz Hernandez

Address: 23773 Via Canon

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concern regarding the limited discussion surrounding the adoption of Alternative #3, which offers a 24% reduction in size and is considered the environmentally superior alternative. I would appreciate your insights and response to the following question:

Why has there been minimal discussion regarding the adoption of Alternative #3, despite its significant environmental benefits and reduction in size compared to other alternatives? What factors have influenced the limited attention given to this alternative during the planning process?

Has there been a comprehensive assessment of the environmental impacts associated with each alternative, including Alternative #3, to inform the decision-making process? If so, what were the findings of this assessment, and how have they been taken into account when considering the adoption of Alternative #3?

What opportunities have been provided for public input and engagement to ensure that the community's concerns and perspectives are taken into consideration regarding the possible adoption of Alternative #3? Have there been any specific reasons why the community's input on this alternative has not been extensively discussed?

Are there any perceived challenges or obstacles in implementing Alternative #3 that have hindered its thorough discussion and consideration? If so, what are these challenges, and are there any plans in place to address them?

How can the planning commission ensure that the adoption of Alternative #3, as the environmentally superior alternative, receives the necessary attention and consideration during the decision-making process? What steps can be taken to ensure that the community's interests, environmental concerns, and overall sustainability objectives are given due weight in the decision?

I appreciate your attention to these questions and look forward to your insights and clarification regarding the limited discussion surrounding the adoption of Alternative #3, despite its recognized environmental superiority. Thank you for your efforts to prioritize sustainable and environmentally conscious development.

Sincerely,

Name: Kandy Book

Address: 4612 Sierra Hwy Acton

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have some inquiries regarding the removal and relocation of oak trees from the proposed Shadowbox Studios project site. I kindly request your insights and responses to the following questions:

How many oak trees are currently located on the project site, and what is the proposed plan for their removal or relocation? Will any efforts be made to minimize the impact on these oak trees during the construction process?

Has an arborist or environmental expert assessed the health and viability of the oak trees on the project site? Will any measures be taken to preserve or protect healthy and significant oak trees that contribute to the ecological value and aesthetic appeal of the area?

Are there plans for the relocation of any oak trees that need to be removed from the project site? If so, what criteria will be used to determine which trees are suitable for relocation, and where will they be relocated to? Will adequate measures be taken to ensure their successful transplanting and survival?

Will there be a tree mitigation plan in place to compensate for the removal of oak trees? If so, what measures will be taken to ensure that the replacement trees are of a similar size, species, and ecological value as those being removed?

How will the removal or relocation of oak trees be coordinated with other aspects of the project, such as grading, infrastructure development, and construction timelines? Will there be efforts to minimize disturbance to the root systems and surrounding ecosystem during the process?

Has there been consultation or involvement of relevant agencies, such as the California Department of Forestry and Fire Protection (CAL FIRE) or local environmental organizations, to ensure compliance with regulations and best practices for the preservation and management of oak trees?

Are there any long-term plans or commitments to plant new oak trees or undertake restoration efforts to enhance the presence of oak woodlands in the vicinity of the Shadowbox Studios project? How will the project contribute to the overall conservation and enhancement of oak tree populations in the region?

I appreciate your attention to these questions and your dedication to the preservation and responsible management of oak trees within the project site. Your insights will contribute to a well-informed decision-making process and ensure the protection of our valuable natural resources.

Sincerely,

Name: Cassandra Mellalieu

Address: 25147 Golden Maple Dr. 9182

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concern regarding the limited discussion surrounding the adoption of Alternative #3, despite its significant environmental advantages, including a 24% reduction in size. I would appreciate your insights and response to the following question:

Why has there been relatively little discussion or consideration given to the adoption of Alternative #3, which is deemed the environmentally superior alternative? What factors or reasons have contributed to the limited attention and exploration of this option during the planning process?

a) Has there been any particular challenge or obstacle that has hindered the broader discussion and evaluation of Alternative #3's environmental benefits and its potential positive impact on the surrounding area?

b) What steps will the planning commission take to ensure that there is a comprehensive and inclusive discussion regarding Alternative #3, allowing for the exploration of its environmental advantages and potential solutions to any identified challenges or concerns?

c) Has the planning commission sought input from environmental experts or conducted an independent assessment of the environmental benefits of Alternative #3? If so, what were the findings of these assessments, and how have they been taken into account during the decision-making process?

d) Are there any plans or strategies in place to actively promote the understanding and awareness of Alternative #3 among the public, stakeholders, and interested parties? How will the planning commission ensure that the broader community has access to information and opportunities to provide feedback on this environmentally superior alternative?

e) What measures will be taken to ensure that the decision-making process regarding the possible adoption of Alternative #3 is transparent, fair, and well-informed? How will the planning commission address any concerns or skepticism regarding the limited discussion surrounding this environmentally advantageous option?

I appreciate your attention to these concerns and the opportunity to gain further insights into the limited discussion surrounding the adoption of Alternative #3 despite its environmentally superior status. Thank you for your efforts in considering the environmental impact of the proposed project and ensuring a comprehensive and inclusive planning process.

Sincerely,

Name: Charlotte Ortega

Address: 22347 Cheviot Drive Saugus CA 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the potential feasibility and considerations of implementing a double lane roundabout as a compromise solution for the intersection of Dockweiler Drive, Arch Street, and 12th Street, especially considering that the city of Santa Clarita has not yet adopted a standard for roundabouts. I would appreciate your response to the following questions:

What potential advantages would a double lane roundabout offer at the intersection in terms of addressing the concerns of both residents and the studio? How could it potentially improve traffic flow, enhance safety, and accommodate the anticipated traffic volumes associated with the Shadowbox Studios project?

Considering that a double lane roundabout may be a less common design in the area due to the absence of a standard, are there any specific challenges or considerations that would need to be addressed to ensure its successful implementation? What potential modifications or adjustments would need to be made to accommodate the double lane configuration in terms of road layout, signage, and markings?

Has there been any analysis or comparison conducted between single lane and double lane roundabouts in terms of their suitability and performance at intersections with similar characteristics to the Dockweiler Drive, Arch Street, and 12th Street intersection? Are there any lessons learned or best practices from other jurisdictions or studies that could inform the decision-making process regarding the potential use of a double lane roundabout in this context?

How would the introduction of a double lane roundabout at this intersection align with the city's broader transportation and infrastructure plans? Would it complement existing roadways and traffic patterns, or would it necessitate significant modifications or adjustments to the surrounding transportation network?

What potential considerations should be taken into account regarding pedestrian, equestrian, and cyclist safety when considering a double lane roundabout? How could the design and layout of the roundabout be optimized to ensure safe and convenient passage for all users, including provisions for crosswalks, bike lanes, horse trail, and appropriate signage?

Are there any potential impacts, either positive or negative, on nearby properties or businesses that would need to be considered when evaluating the feasibility of a double lane roundabout? How would these impacts be mitigated or addressed to ensure a harmonious coexistence between the roundabout and the surrounding community?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the feasibility and potential considerations of implementing a double lane roundabout as a compromise solution for the intersection of Dockweiler Drive, Arch Street, and 12th Street in the absence of an adopted roundabout standard in the city of Santa Clarita.

Sincerely,

Name: Rachael Campos RCC

Address: 17420 Willow St Granada Hills CA 91344

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my support for the adoption of Alternative #3. Its designation as the environmentally superior alternative with a significant reduction in size is worthy of your consideration. I would appreciate your insights and response to the following question:

Could you please elaborate on why there has been so little discussion regarding the adoption of Alternative #3, considering its designation as the environmentally superior alternative and its substantial reduction in size compared to other alternatives? What factors have contributed to the limited exploration and consideration of this option?

Additionally, I would like to understand the following:

What steps have been taken to ensure that the environmental benefits and reduced footprint of Alternative #3 are adequately recognized and given appropriate weight in the decision-making process? How has the planning commission balanced the environmental considerations with other relevant factors in evaluating the proposed studio project?

Has there been an assessment of the potential environmental impacts associated with the full size project under consideration? How does this compare to Alternative #3 in terms of their environmental effects, such as habitat disturbance, water usage, energy consumption, and overall ecological footprint?

What efforts have been made to gather public input and community feedback specifically on Alternative #3 and its environmental advantages? Have there been opportunities for residents, environmental experts, and other stakeholders to voice their opinions and concerns regarding the adoption of this alternative?

Are there any specific plans or strategies in place to ensure that the environmental benefits of Alternative #3 are maximized during the implementation and operation of the studio project should you require that alternative in your approval? How will adherence to environmentally friendly practices and mitigation measures be monitored and enforced?

Given the environmentally superior status of Alternative #3, what steps will be taken to educate the public and stakeholders about its merits and the rationale behind its adoption? How will the planning commission communicate and justify the decision to prioritize environmental considerations in the approval process?

I appreciate your attention to these questions and the opportunity to gain further insights into the limited discussion surrounding the adoption of Alternative #3, despite its designation as the environmentally superior alternative. Thank you for your commitment to considering the environmental impact of the proposed studio project.ank you for your efforts to prioritize sustainable and environmentally conscious development.

Sincerely,

Name: Tisha Hodge

Address: 20449 Gay Carroll Dr Saugus 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing this letter to express my conditional support for the adoption of Alternative #3 for the Shadowbox Studios project. As a concerned resident of the Santa Clarita community, I believe that Alternative #3 presents a balanced and environmentally superior approach that aligns with the vision and values of our community. I would like to highlight several key reasons for endorsing this alternative:

Environmental Conservation: Alternative #3, with its 24% reduction in size, represents a significant step towards minimizing the ecological footprint of the studio project. By reducing the development's impact on sensitive habitats and natural resources, this alternative demonstrates a commitment to environmental conservation, which is crucial for preserving the beauty and integrity of our region.

Traffic Management: The adoption of Alternative #3 can alleviate concerns about increased traffic congestion and its associated impacts. With its smaller size and thoughtful design, this alternative allows for better traffic flow management, reducing the potential burden on local roadways and mitigating disruptions to nearby residential areas.

Community Compatibility: Alternative #3 strikes a balance between the needs of the studio project and the surrounding community. By reducing the scale of the development, this alternative helps to preserve the character of our neighborhoods and maintain the quality of life enjoyed by Santa Clarita residents. It ensures that the project integrates seamlessly with the existing urban fabric and minimizes potential disruptions.

Environmental Stewardship: The adoption of Alternative #3 reflects a commitment to being good stewards of our environment. By embracing a smaller footprint, this alternative demonstrates an understanding of the importance of sustainability and responsible development practices. It sets a positive precedent for future projects in our community, promoting a culture of environmental consciousness.

Public Support: As an engaged member of the community, I have witnessed widespread support for Alternative #3 among fellow residents, community organizations, and environmental advocates. This alternative resonates with the shared values of our community and enjoys significant public backing, reflecting a desire for sustainable and harmonious development.

In conclusion, I strongly urge the Santa Clarita Planning Commission to adopt Alternative #3 for the Shadowbox Studios project. Its reduced size, environmental benefits, and closer compatibility with the community make it a clear choice that aligns with the long-term vision and well-being of our city. I believe that by selecting Alternative #3, we can strike a balance between economic growth and environmental responsibility, ensuring a sustainable future for Santa Clarita.

Thank you for your careful consideration of this matter. I trust that you will take into account the voices of concerned residents and the overall benefits that Alternative #3 offows to our community and environment. Should you require any further information or have any questions, please do not hesitate to contact me.

Sincerely,

Name: Monica Candelaria

Address: 33740 Kobe Rd, Agua Dulce, CA, 91390

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my support for Alternative #3 as the preferred option for the proposed Shadowbox Studios Project. I believe that Alternative #3 offers numerous benefits and aligns well with the goals of environmental sustainability, community welfare, and responsible development. I urge the planning commission to carefully consider and ultimately select Alternative #3 as the approved option for this project.

Alternative #3, with its 24% reduction in size compared to other alternatives, demonstrates a commendable commitment to minimizing the environmental footprint of the studio project. This reduction in size would help preserve and protect the natural resources, wildlife habitats, and scenic beauty of the surrounding area, including the cherished Placerita Canyon. By adopting Alternative #3, the planning commission would showcase the city's dedication to responsible land use and the preservation of its unique natural assets.

Furthermore, Alternative #3 holds the potential to minimize traffic congestion and reduce the impact on the existing roadways and transportation infrastructure. With thoughtful planning and implementation, the addition of at least one additional ingress/egress gate that does not feed into Placerita Canyon, as part of Alternative #3, can improve traffic flow and enhance safety for both studio personnel and the community.

I also appreciate that Alternative #3 has been identified as the environmentally superior alternative. This designation signifies that the selected option aligns with the city's environmental goals, including reducing greenhouse gas emissions, conserving water resources, and mitigating ecological impacts. By adopting Alternative #3, the planning commission would send a strong message of commitment to sustainability and set a positive example for future development projects in the area.

In conclusion, I firmly believe that Alternative #3 is the most responsible, environmentally conscious, and community-oriented option for the Shadowbox Studios Project. Its reduced size, improved traffic flow, and alignment with environmental goals make it the clear choice. I trust that the planning commission will carefully consider these factors and make a decision that benefits both the current and future residents of Santa Clarita.

Thank you for your attention to this matter, and I appreciate your efforts in evaluating the alternatives for the Shadowbox Studios Project. I have full confidence that the planning commission will make a well-informed decision that upholds the values of sustainability, community welfare, and responsible development.

Sincerely,

Name: Amy Thomson

Address: 24608 WALNUT ST NEWHALL

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my support for the adoption of Alternative #3 for the Shadowbox Studios project. As a resident of Santa Clarita, I believe that Alternative #3 offers a balanced and environmentally conscious approach that aligns with the values and aspirations of our community.

Alternative #3, with its 24% reduction in size, demonstrates a commitment to environmental preservation, sustainable development and community preservation. By minimizing the project's footprint, this alternative reduces the potential impact on sensitive habitats, natural resources, and wildlife. It reflects a responsible approach to development that prioritizes the long-term health of our ecosystem.

Moreover, adopting Alternative #3 will help alleviate concerns regarding increased traffic congestion. With a smaller scale, this alternative allows for better traffic flow management and minimizes potential disruptions to surrounding neighborhoods. By considering the impact on local roadways and implementing thoughtful design, we can ensure that the project integrates harmoniously with the existing transportation infrastructure.

I appreciate the careful deliberation and analysis that the Planning Commission has undertaken in evaluating the various alternatives. It is my belief that Alternative #3 strikes the right balance between economic growth and community well-being. By adopting this alternative, we can demonstrate our commitment to sustainable development practices and showcase Santa Clarita as a responsible and forward-thinking city.

I kindly request that the Planning Commission carefully consider the merits of Alternative #3 and the widespread community support it has garnered. This alternative has resonated with residents, community organizations, and environmental advocates, who see it as a crucial step towards a sustainable future for our city.

Thank you for your dedication to the well-being of Santa Clarita and your consideration of Alternative #3 for the Shadowbox Studios project. I trust that you will make a decision that reflects the values and aspirations of our community.

Sincerely,

Name: Jay Ng

Address: 21055 Rotunda Rd.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my support for the adoption of Alternative #3 for the Shadowbox Studios project. As an active member of the Santa Clarita community, I believe that Alternative #3 represents the best choice for our city and its future development. I would like to share my reasons for endorsing this alternative:

Environmental Considerations: Alternative #3 offers a significant reduction in the size of the studio project. This reduction is crucial for preserving our natural resources, protecting sensitive habitats, and maintaining the ecological balance of our region. By prioritizing environmental conservation, we can ensure a sustainable and thriving community for future generations.

Traffic Management: The smaller scale of Alternative #3 presents an opportunity to better manage traffic flow and mitigate congestion issues. With thoughtful design and consideration, this alternative can minimize disruptions to local roadways and alleviate concerns about increased traffic in surrounding residential areas. It is crucial to prioritize the smooth and efficient movement of vehicles while maintaining the safety of pedestrians and cyclists.

Community Compatibility: Alternative #3 strikes a balance between the needs of the studio project and the interests of our community. By reducing the size of the development, this alternative preserves the character and integrity of our neighborhoods. It respects the concerns of local residents, ensures the project's compatibility with the existing urban fabric, and minimizes potential disruptions during the construction and operation phases.

Sustainable Growth: The adoption of Alternative #3 demonstrates a commitment to responsible and sustainable development practices. By embracing a smaller footprint, we prioritize the long-term health and vitality of our city. This alternative sets a positive example for future projects and reinforces our commitment to being good stewards of our environment.

Public Support: Alternative #3 has garnered strong support from community members, local organizations, and environmental advocates. It reflects the shared values and aspirations of Santa Clarita residents who seek a sustainable and harmonious balance between economic growth and environmental responsibility. By choosing Alternative #3, we honor the voices of our community and demonstrate our commitment to listening and responding to the concerns of our residents.

I kindly request the Santa Clarita Planning Commission to carefully consider the merits of Alternative #3 in the decision-making process for the Shadowbox Studios project. Its environmental benefits, traffic management potential, compatibility with our community, and support from residents make it a clear choice for a sustainable future for Santa Clarita.

Thank you for your time and consideration. I trust that you will take into account the opinions and desires of the community, and make a decision that will benefit our city in the long run. If you require any further information or have any questions, please do not hesitate to reach out to me.

Sincerely,

Name: Garrett Martin

Address: 23470 N Carlton Ave

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding the aesthetics of the proposed Shadowbox Studios project and its compatibility with the rural and equestrian character of the Placerita Canyon community. I kindly request your insights and responses to the following:

Has there been a thorough analysis conducted to assess the visual impact of the Shadowbox Studios project on the surrounding area? How will the proposed design, architecture, and landscaping of the studios contribute to or detract from the existing aesthetics of Placerita Canyon?

What measures will be taken to ensure that the design of the studios complements the rural and equestrian character of Placerita Canyon? Will the materials, colors, and architectural styles be chosen to blend harmoniously with the existing structures and natural surroundings?

Are there any specific design guidelines or requirements in place to maintain the visual integrity of the Placerita Canyon community? How will the studios be designed to respect and enhance the scenic qualities and heritage of the area?

Will there be provisions for landscape buffering or visual screening to minimize the visual impact of the studios on neighboring properties and public view corridors? How will these measures be implemented and maintained throughout the project's lifespan?

Has there been consultation or involvement of local residents, community organizations, or design professionals to gather input on the aesthetics of the studios and their compatibility with the Placerita Canyon community? How have these perspectives influenced the planning commission's considerations and decision-making process?

Are there any plans or commitments to incorporate public art installations or other creative elements within the studios or their immediate surroundings? How will these elements enhance the visual appeal and cultural significance of the project while respecting the unique character of Placerita Canyon?

Will there be any efforts to minimize light pollution and glare from the studios to preserve the dark sky conditions in Placerita Canyon? How will outdoor lighting be designed and managed to ensure it does not negatively impact the nocturnal environment or the rural ambiance of the community?

I appreciate your attention to these questions and your dedication to maintaining the aesthetics and character of the Placerita Canyon community. Your insights will contribute to a well-planned and visually appealing development that respects and enhances the unique qualities of our beloved community.

Sincerely,

Name: Kat Graies

Address: 27484 Mulberry Ct, Santa Clarita CA 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have some inquiries regarding the aesthetics of the proposed Shadowbox Studios project and its compatibility with the rural and equestrian character of the Placerita Canyon community. I kindly request your insights and responses to the following questions:

How will the design of Shadowbox Studios incorporate elements that complement the existing rural and equestrian character of Placerita Canyon? Are there plans to incorporate architectural features, landscaping, or other design elements that work with the natural surroundings and the aesthetics of the community?

Has there been consideration given to the visual impact of Shadowbox Studios on the scenic beauty of Placerita Canyon? What measures will be taken to minimize any adverse visual effects and ensure that the project blends seamlessly into the surrounding environment?

Will there be specific design guidelines or requirements in place to ensure that the materials, colors, and architectural styles used in the construction of the studio facilities are in harmony with the existing buildings and structures in Placerita Canyon? How will the planning commission ensure that the project maintains a cohesive and aesthetically pleasing appearance?

What provisions will be made to preserve and enhance the existing landscaping and vegetation within and around the Shadowbox Studios project site? Are there plans for native plantings, open green spaces, or other landscaping elements that contribute to the rural and natural ambiance of the area?

Has the community been involved in discussions or provided input regarding the aesthetic aspects of the Shadowbox Studios project? If so, what feedback has been received from residents and local stakeholders, and how has it influenced the planning commission's considerations and decision-making process?

Will there be any restrictions or guidelines regarding outdoor signage, lighting, or other visual elements associated with the studio facilities? How will these aspects be regulated to minimize visual clutter and maintain the character of Placerita Canyon?

Are there any plans for public art installations or other creative features within the Shadowbox Studios project that can enhance the visual appeal and contribute to the cultural vitality of the Placerita Canyon community?

I appreciate your attention to these questions and your efforts to ensure that the aesthetics of the Shadowbox Studios project align with the rural and equestrian character of Placerita Canyon. Your insights will contribute to a visually pleasing and harmonious integration of the development within our community.

Thank you for your consideration.

Sincerely,

Name: HERNAN CASTANEDA

Address: 19948 TRACY CT 91351

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have some questions regarding the potential impact of flooding in Placerita Canyon during heavy rain events. I would appreciate your insights and information on the following matters:

What measures have been taken or are planned to address the risk of flooding in Placerita Canyon during heavy rain events? Has a comprehensive flood risk assessment been conducted to evaluate the potential extent and severity of flooding in the area? Does the DEIR address this potential sufficiently?

How will the proposed Shadowbox Studios project and associated development in the vicinity of Placerita Canyon mitigate the risk of flooding? Have flood control and drainage systems been designed or implemented to prevent or minimize flooding impacts on the studio campus and surrounding areas?

Are there any specific regulations or guidelines in place to ensure that the studio project adheres to best practices for flood management? How will the project's design and construction address the potential for increased runoff and its effect on downstream areas?

Has there been consultation or coordination with relevant agencies, such as the County Department of Public Works or the Flood Control District, to assess and address the potential flooding risks in Placerita Canyon? What insights or recommendations have been provided by these agencies in relation to flood mitigation measures?

How will the proposed development impact the natural drainage patterns and existing floodplains within Placerita Canyon? Has there been an evaluation of the project's potential to alter the flow of water and exacerbate flooding risks in the area?

Will the studio project incorporate any additional measures, such as the construction of retention basins or the implementation of stormwater management practices, to help alleviate flooding concerns in Placerita Canyon? If so, what are the details of these measures and how will their effectiveness be ensured?

Are there any emergency response plans in place to address potential flooding events in Placerita Canyon, particularly in relation to the studio project? How will emergency services and evacuation procedures be coordinated to ensure the safety of residents, employees, and visitors in the area?

I appreciate your attention to these questions and the opportunity to gain a better understanding of the planning and mitigation efforts related to flooding in Placerita Canyon. Thank you for your commitment to ensuring the safety and well-being of our community.

Sincerely,

Name: ANDRE MAZIAN

Address: 23030 Parkwood Dr Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I would like to inquire about the potential impact of heavy rain events on flooding in Placerita Canyon. Given the significance of this concern, I kindly request your insights and responses to the following questions:

How has the proposed Shadowbox Studios project accounted for the risk of flooding in Placerita Canyon during heavy rain events? Has a thorough analysis of the area's drainage system and flood patterns been conducted to assess the project's potential impact on flooding?

What measures will be implemented to mitigate the risk of flooding associated with the studio project? Are there plans for adequate stormwater management infrastructure, such as retention basins or drainage channels, to handle the increased runoff during heavy rain events?

Has a hydrological study been performed to determine the project's potential effects on the capacity of existing waterways and drainage systems in Placerita Canyon? How will the project ensure that the additional runoff from the development does not exacerbate flooding conditions in the area?

Will there be provisions to maintain and monitor the stormwater management systems on an ongoing basis to ensure their effectiveness and prevent potential flooding incidents? How will the responsible party be held accountable for regular maintenance and addressing any necessary repairs or modifications?

Has the community's input been sought regarding the potential flood risks associated with the studio project? What concerns or suggestions have been raised by local residents, businesses, and relevant stakeholders, and how have these considerations influenced the planning commission's approach to flood mitigation?

Will the project adhere to established best practices and regulations concerning stormwater management and flood prevention, such as the requirements set forth by local, state, and federal agencies? How will compliance with these regulations be ensured throughout the construction and operation phases of the project?

What plans are in place to communicate and educate the public about the flood risks in Placerita Canyon, particularly in relation to the studio project? How will the community be informed of the measures taken to mitigate flooding and the steps they can take to stay safe during heavy rain events?

In the event of a significant flood event, what emergency response protocols are in place to protect the safety and well-being of residents, studio personnel, and other individuals in the area? How will communication and coordination among relevant agencies be facilitated during such events?

I appreciate your attention to these important questions and the opportunity to gain further insights into the flood risk considerations for the proposed Shadowbox Studios project. Thank you for your commitment to addressing community concerns and ensuring the safety and sustainability of our region.

Sincerely,

Name: DAVID SALAZAR

Address: 24505 TOWN CENTER DR. VALENCIA

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my strong support for the adoption of Alternative #3 for the Shadowbox Studios project. I believe that Alternative #3 offers numerous benefits and represents the most environmentally responsible choice for the development.

Alternative #3, with its 24% reduction in size compared to other alternatives, is the environmentally superior option that aligns with the goals of sustainability and responsible land use. By minimizing the footprint of the studio project, Alternative #3 helps preserve the natural beauty of the surrounding area, protects sensitive ecosystems, and minimizes habitat disruption. This reduction in size demonstrates a commitment to environmental stewardship and a consideration for the long-term sustainability of our community.

Furthermore, Alternative #3 promotes efficient land use and respects the unique character of Placerita Canyon. It preserves the visual aesthetics of the area by minimizing the visual impact of the studio project. This approach not only maintains the scenic beauty that attracts residents and visitors to the region but also ensures compatibility with the existing natural and cultural features of Placerita Canyon.

Additionally, Alternative #3 emphasizes the need for responsible traffic management. With its consideration for at least one additional ingress/egress gate that does not feed into Placerita Canyon, this alternative addresses concerns regarding traffic congestion, emergency response access, and the overall transportation infrastructure plan for the Santa Clarita area. By distributing traffic flow and providing alternative routes, it helps alleviate potential burdens on local roadways and ensures a more efficient and safer transportation network for both the studio project and the surrounding community.

I appreciate the efforts and considerations of the Santa Clarita Planning Commission in evaluating the various alternatives for the Shadowbox Studios project. Alternative #3, with its reduced size, environmental benefits, and emphasis on responsible traffic management, represents a balanced approach that upholds both the needs of development and the preservation of our natural resources.

In conclusion, I strongly urge the planning commission to adopt Alternative #3 for the Shadowbox Studios project. This alternative reflects a commitment to environmental sustainability, responsible land use, and the long-term well-being of our community. By supporting Alternative #3, we can ensure a harmonious balance between economic growth and environmental conservation.

Thank you for your attention to this matter. I trust that you will give careful consideration to the significant environmental advantages of Alternative #3 in your decision-making process.

Sincerely,

Name: Jelsi Chinchilla

Address: 20059 Avenue of the Oaks, Newhall

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential risks of flooding in Placerita Canyon during heavy rain events and to seek clarification on the measures being taken to address this concern. I have several questions regarding this matter and would appreciate your insights and response:

What are the historical flood patterns in Placerita Canyon during heavy rain events? Has there been any assessment of the flood risk in the area, particularly in relation to the proposed Shadowbox Studios project? If so, what were the findings of these assessments, and how have they influenced the planning process?

What measures will be implemented to mitigate the risk of flooding in Placerita Canyon, both during the construction phase and once the studio project is operational? Are there any specific design elements or infrastructure improvements planned to address potential flood hazards in the area?

Has the proposed project undergone a comprehensive hydrological analysis to evaluate its impact on local water flow patterns and the potential for increased flooding in Placerita Canyon? If so, what were the findings of this analysis, and how have they been incorporated into the project's design and mitigation plans?

Will there be any requirements or conditions of approval related to stormwater management and drainage systems to ensure that the project does not exacerbate existing flooding issues in Placerita Canyon? How will the effectiveness of these systems be monitored and evaluated over time?

Has the community been consulted or involved in the assessment of flood risks and the development of flood mitigation strategies for Placerita Canyon? What feedback has been received from residents, local businesses, and other stakeholders regarding this issue, and how has it been taken into account during the planning process?

Are there any provisions in place to ensure that the project's construction activities do not contribute to soil erosion or other factors that could increase the likelihood of flooding in Placerita Canyon? How will compliance with these provisions be monitored and enforced?

Has there been coordination with relevant local agencies, such as flood control districts or water resource management authorities, to address potential flooding concerns in Placerita Canyon? Are there any joint efforts or partnerships in place to manage flood risks and ensure the safety of residents and the proposed studio project?

What emergency response plans are being developed to address potential flooding events in Placerita Canyon? How will the safety of residents, studio personnel, and surrounding areas be ensured during such incidents? Are there any evacuation protocols or procedures in place to mitigate risks and protect lives and property?

I appreciate your attention to these questions and your commitment to addressing the potential flooding concerns in Placerita Canyon. It is important to prioritize the safety and well-being of our community and to ensure that appropriate measures are in place to mitigate the risks associated with heavy rain events.

Thank you for your time and consideration. I look forward to your insights and clarification on this matter.

Sincerely,

Name: Alex Mota

Address: 1937 Newhouse St. Canyon Country CA 91351

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding the removal and relocation of oak trees from the proposed Shadowbox Studios project site. I would greatly appreciate your insights and responses to the following:

How many oak trees are currently present on the project site, and what is the proposed plan for their removal or relocation? Will any efforts be made to minimize the impact on these trees, considering their ecological significance and the visual appeal they add to the landscape?

What criteria have been established to determine which oak trees will be relocated and which ones will be removed? Will the relocation process be conducted by professionals with expertise in tree transplantation to ensure the highest chances of survival and successful establishment in their new locations?

Has an arborist or a tree specialist been consulted to assess the health and viability of the oak trees on the project site? Will their recommendations be taken into consideration when determining the fate of these trees?

Are there any specific plans to replace or mitigate the loss of oak trees on the project site? Will new oak trees be planted elsewhere on the property or in the vicinity to compensate for the removal of existing trees?

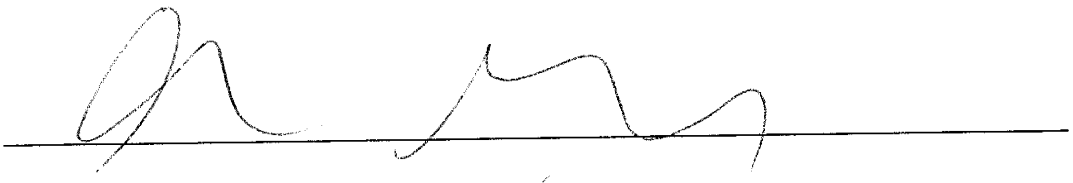
Will there be measures in place to protect any remaining oak trees on the project site during the construction phase? How will the construction activities be managed to prevent damage or stress to these trees, including their root systems?

Has public input been sought to gather opinions and concerns regarding the removal or relocation of oak trees? How have these perspectives influenced the planning commission's considerations and decision-making process in relation to the project's impact on the local tree canopy?

What monitoring and follow-up measures will be implemented to ensure the success and survival of relocated oak trees? Will there be a timeframe for evaluating their health and establishment in their new locations?

I appreciate your attention to these questions and your commitment to preserving and mitigating the impact on oak trees during the development of the Shadowbox Studios project. Your insights will contribute to an environmentally responsible and sensitive approach to tree management on the site.

Sincerely,

Name: 

Address: 25029 Cold Water Valley 91354

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the considerations that planning commissioners would take into account when determining a condition of approval regarding the design of Dockweiler Drive, specifically focusing on the safety factors associated with roundabouts as opposed to the signalized light sequence proposed by Shadowbox Studios. I would appreciate your response to the following questions:

In considering the safety factors, what specific aspects of roundabouts will be taken into account when determining the condition of approval for the design of Dockweiler Drive? How would factors such as reduced speeds, improved traffic flow, and potential reductions in severe accidents and collisions be considered?

Has there been any analysis or comparison conducted between roundabouts and signalized intersections in terms of safety performance? Are there any studies or data available that demonstrate the potential safety benefits of roundabouts, such as lower crash rates, reduced severity of accidents, and improved pedestrian and cyclist safety?

Has there been any engagement or consultation with traffic engineering experts, transportation authorities, or other professionals experienced in roundabout design and implementation to gather insights and expertise on the safety considerations associated with roundabouts? Will their recommendations or findings taken into account during the decision-making process?

How would the specific characteristics of the Dockweiler Drive area, such as anticipated traffic volumes, road geometry/incline/descent, existing infrastructure, and pedestrian and cyclist usage, influence the safety considerations when comparing a roundabout to a signalized light sequence? Would there be any modifications or enhancements required to ensure optimal safety performance of the chosen design?

What opportunities would be available to educate the public and road users about the safe usage and proper navigation of roundabouts if Placerita Canyon's preferred roundabout were to be included in the condition of approval for the Dockweiler Drive design? How would awareness and understanding of roundabout rules and best practices be promoted to ensure a smooth transition and safe operation for all users?

Are there any specific safety guidelines or standards that would need to be met in the design and implementation of a roundabout at Dockweiler Drive? What measures would be taken to address potential concerns or conflicts, such as pedestrian and cyclist access, horse crossings, signage and markings, and visibility for drivers approaching the roundabout?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the safety considerations associated with roundabouts and the potential impact on the condition of approval for the design of Dockweiler Drive.

Sincerely,

Name: Mrs. Soozing Crawford

Address: Resident SCV

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the considerations that planning commissioners would take into account when determining a condition of approval regarding the design of Dockweiler Drive in relation to Placerita Canyon's preferred roundabout versus the signalized light sequence proposed by Shadowbox Studios. I would appreciate your response to the following question:

What specific considerations would planning commissioners take into account when determining a condition of approval that requires the City's design of Dockweiler Drive that incorporates Placerita Canyon's preferred roundabout instead of the signalized light sequence proposed by Shadowbox Studios? How will the factors of safety and community preferences be weighed in the decision-making process?

Thank you for your attention to this question. I look forward to your insights and clarification regarding the considerations for a condition of approval that would require the incorporation of Placerita Canyon's preferred roundabout in the design of Dockweiler Drive.

Sincerely,

Name: Alondra Aguilar

Address: 2400 Race Street, Newhall, CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the considerations that planning commissioners would take into account when determining a condition of approval regarding the design of Dockweiler Drive in relation to Placerita Canyon's preferred roundabout versus the signalized light sequence proposed by Shadowbox Studios. In particular, I am interested in understanding the safety factors associated with roundabouts and how they would be weighed in the decision-making process. I kindly request your insights and response to the following questions:

How would safety considerations be evaluated when determining a condition of approval that requires the City's design of Dockweiler Drive to incorporate Placerita Canyon's preferred roundabout? What specific safety factors associated with roundabouts would be taken into account, such as reduced speeds, improved visibility, and decreased conflict points?

Has there been any analysis or comparison conducted between roundabouts and signalized light sequences in terms of safety performance? Are there any studies or data available that demonstrate the potential safety benefits of roundabouts over traditional signalized intersections?

What is the historical safety record of roundabouts within the Santa Clarita area or other similar locations versus collision frequency at signalized intersections? Have there been any reported incidents or accidents at existing roundabouts that could inform the decision-making process regarding the design of Dockweiler Drive?

Will there be a comprehensive safety assessment conducted specifically for the proposed signalized lights at Dockweiler Drive to ensure that it meets the required standards and guidelines? How will the safety of various road users, including vehicles, pedestrians, horses, and cyclists, be taken into consideration during the design and implementation if the roundabout is taken away?

Has there been any consultation or engagement with local transportation authorities, law enforcement agencies, and other safety experts to gather input and feedback on the safety considerations associated with roundabouts? How have their perspectives been incorporated into the decision-making process?

How will the potential safety benefits of roundabouts be communicated to the public, particularly to address any concerns or misconceptions that may exist? Will there be efforts to provide education and awareness about roundabout usage and safe practices for all road users?

Will there be ongoing monitoring and evaluation of the safety performance of the roundabout or signalized lights at Dockweiler Drive once it is operational? How will any identified safety issues or concerns be addressed, and will there be mechanisms in place for making adjustments or improvements as necessary?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the considerations for a condition of approval that would require the incorporation of Placerita Canyon's preferred roundabout in the design of Dockweiler Drive, particularly in relation to the safety factors associated with roundabouts. Understanding the thoroughness of the safety evaluation process will help ensure a well-informed decision that prioritizes the well-being and safety of all road users.

Sincerely,

Name: Natalie Gregorsi

Address: 24145 Silver Oak Ln Santa Clarita

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I would like to inquire about the potential impact of heavy rain events on flooding in Placerita Canyon. I have several questions regarding this matter and would appreciate your insights:

1. What measures have been taken to assess the risk of flooding in Placerita Canyon during heavy rain events? Has a comprehensive flood risk analysis been conducted to evaluate the vulnerability of the area?
2. Are there any existing flood control infrastructure or systems in place to mitigate the risk of flooding in Placerita Canyon? If so, how effective are these measures in handling heavy rain events? Are there any plans to enhance or upgrade the flood control infrastructure in the area?
3. How will the proposed Shadowbox Studios project take into account the potential risk of flooding in Placerita Canyon? Have flood mitigation strategies been incorporated into the project's design and planning process to ensure the safety and protection of the studio facilities, surrounding properties, and residents?
4. In the event of heavy rain and subsequent flooding in Placerita Canyon, what emergency response plans are in place to ensure the safety and well-being of residents, including those in the vicinity of the Shadowbox Studios project? How will evacuation procedures be coordinated, and what communication channels will be utilized to alert and inform residents in a timely manner?
5. Has the potential for increased stormwater runoff from the studio project itself been evaluated? What measures will be implemented to manage and control stormwater runoff, particularly during heavy rain events, to prevent additional strain on the existing drainage systems and mitigate the risk of flooding downstream?
6. How will the impact of climate change, including potential increases in the frequency and intensity of heavy rain events, be considered in the assessment of flood risk and mitigation strategies for Placerita Canyon? Are there any plans to incorporate climate resilience measures into the planning and design of the Shadowbox Studios project?
7. Will there be ongoing monitoring and evaluation of flood risks and the effectiveness of flood control measures in Placerita Canyon? How will any necessary adjustments or improvements be identified and implemented to ensure the continued safety and resilience of the area?

I appreciate your attention to these questions and your commitment to addressing the potential impact of flooding in Placerita Canyon during heavy rain events. Understanding the measures in place to mitigate flood risks and protect the well-being of the community is essential for responsible planning and decision-making.

Thank you for your time and consideration. I look forward to your insights and updates regarding the management of flooding in Placerita Canyon.

Sincerely,

Name: Kristal Sheffer

Address: 38425 ~~15th~~ St W, Palmdale CA

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my support for the adoption of Alternative #3 for the Shadowbox Studios project. I believe that this alternative offers significant benefits for our community and the environment, and I would like to outline my reasons for endorsing it.

First and foremost, Alternative #3 demonstrates a commitment to environmental conservation. With its 24% reduction in size, this alternative helps minimize the project's impact on sensitive habitats, natural resources, and the overall ecological integrity of our region. By choosing Alternative #3, we can ensure that the development is conducted in a responsible and sustainable manner, preserving the natural beauty of our surroundings for future generations.

Furthermore, Alternative #3 addresses concerns regarding traffic management. Its smaller size allows for better traffic flow and congestion mitigation, minimizing the potential disruptions to local roadways and neighboring residential areas. By prioritizing efficient transportation planning, this alternative takes into account the needs of both the studio project and the surrounding community, ensuring a harmonious coexistence.

I also appreciate how Alternative #3 aligns with the existing character of our community. By reducing the scale of the development, this alternative preserves the unique charm and quality of life enjoyed by Santa Clarita residents. It demonstrates a thoughtful approach to growth that respects the values and interests of our community, fostering a positive and sustainable future for all.

Lastly, I want to emphasize the public support for Alternative #3. Through conversations with fellow residents, community organizations, and environmental advocates, it is clear that this alternative resonates strongly with our shared values. Its adoption would not only reflect the desires of the community but also set a positive example for future development projects in Santa Clarita.

In conclusion, I urge the Santa Clarita Planning Commission to carefully consider and ultimately select Alternative #3 for the Shadowbox Studios project. This alternative offers a balanced and environmentally superior approach that prioritizes conservation, traffic management, community compatibility, and public support. By choosing Alternative #3, we can ensure a sustainable and prosperous future for our community.

Thank you for your time and attention to this matter. I trust that you will give due consideration to the voices of concerned residents and the long-term benefits that Alternative #3 brings to Santa Clarita. Should you require any further information or have any questions, please do not hesitate to reach out.

Sincerely,

Name: Alfredo Orozco

Address: 10210 Telfair Ave Pacoima CA 91331

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the feasibility and potential compromise of implementing a double lane roundabout at the intersection of Dockweiler Drive, Arch Street, and 12th Street as an alternative to address the concerns of both residents and the studio. Given there has never been an adoption of a standard for roundabouts in the city of Santa Clarita, I would appreciate your insights and response to the following question:

Considering the absence of a standard for roundabouts in Santa Clarita, could a double lane roundabout be considered as a potential compromise between the preferences of residents and the needs of the studio at the intersection of Dockweiler Drive, Arch Street, and 12th Street? What factors would be taken into account when evaluating the feasibility and appropriateness of such a design?

Thank you for your attention to this question. I look forward to your insights and clarification regarding the potential consideration of a double lane roundabout as a compromise solution at the mentioned intersection.

Sincerely,

Name: Bertrand Sheffer

Address: 38425 5th St. W Apt F111 Palmdale, CA 93551

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I would like to inquire about the aesthetics of the proposed Shadowbox Studios project and its compatibility with the rural and equestrian character of the Placerita Canyon community.

What efforts have been made to ensure that the design and aesthetics of the Shadowbox Studios project are in harmony with the surrounding rural and equestrian environment of Placerita Canyon? Have there been considerations given to architectural styles, materials, and landscaping that will complement the existing character of the community?

Will the proposed development incorporate design elements that preserve the scenic beauty and natural landscape of Placerita Canyon? Are there plans to protect and enhance views, vistas, and open spaces that are cherished by the community and contribute to its unique identity?

Has there been any collaboration with local community organizations, such as the Placerita Canyon Property Owners Association or equestrian groups, to gather input and ensure that the project's aesthetics align with their expectations? How has this feedback influenced the planning commission's considerations and decision-making process?

Will there be guidelines or restrictions in place to control the visual impact of the studio facilities, such as building heights, signage, lighting, or other visual elements? How will the planning commission ensure that the project's visual components are respectful of the rural and equestrian character of Placerita Canyon?

Are there plans for integrating sustainable and environmentally friendly design practices into the project's aesthetics? Will features such as green spaces, native plantings, or renewable energy systems be incorporated to enhance the overall visual appeal and environmental compatibility of the development?

How will the visual impact of the Shadowbox Studios project be evaluated and monitored once it is operational? Are there mechanisms in place to address any unforeseen issues related to aesthetics and ensure ongoing compliance with the approved design guidelines and aesthetic considerations?

Will there be opportunities for public input and review of the project's aesthetics during the construction phase? How will community members and stakeholders be engaged to provide feedback and suggestions regarding the visual aspects of the development?

I appreciate your attention to these questions and your commitment to maintaining the aesthetic integrity of Placerita Canyon while considering the Shadowbox Studios project. Your insights and efforts to ensure a visually compatible and respectful development will contribute to the overall well-being and satisfaction of the community.

Sincerely,

Name: Cheryl Perez

Address: 22621 Dragonfly Ct. Santa Clarita Ca 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the possibility of considering a double lane roundabout as a potential compromise between residents and the studio at the intersection of Dockweiler Drive, Arch Street, and 12th Street, particularly in light of the city of Santa Clarita not having adopted a standard for roundabouts at this time. I would appreciate your response to the following questions:

In the absence of a roundabout standard in Santa Clarita, what specific considerations would need to be taken into account when evaluating the feasibility and potential benefits of a double lane roundabout at the intersection of Dockweiler Drive, Arch Street, and 12th Street? How would factors such as traffic volume, road geometry, pedestrian and cyclist usage, and future growth and development be considered in the decision-making process?

Has there been any analysis or comparison conducted between single lane and double lane roundabouts in terms of their suitability and effectiveness at similar intersections? Are there any studies or data available that demonstrate the potential benefits and challenges associated with double lane roundabouts, particularly in relation to traffic flow, safety, and capacity?

Considering the unique characteristics and needs of the intersection at Dockweiler Drive, Arch Street, and 12th Street, what advantages might a double lane roundabout offer over alternative solutions, such as signalized intersections or other intersection designs? How would the inclusion of an additional lane address concerns related to traffic congestion, efficient movement of vehicles, and potential future growth in the area?

What potential challenges or limitations might arise in implementing a double lane roundabout at the specific location? Are there any constraints, such as land availability, right-of-way considerations, or existing infrastructure, that would need to be carefully evaluated and addressed?

Given that a double lane roundabout may be a novel concept for the city of Santa Clarita, what opportunities would exist to educate the public and road users about the safe usage and proper navigation of a double lane roundabout at this intersection? How would awareness and understanding of double lane roundabout rules and best practices be promoted to ensure a smooth transition and safe operation for all users?

What additional studies, evaluations, or expert consultations might be necessary to assess the suitability and potential impacts of a double lane roundabout at the intersection of Dockweiler Drive, Arch Street, and 12th Street? How would community input and stakeholder feedback be incorporated into the decision-making process regarding the choice of intersection design?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the feasibility and potential considerations of a double lane roundabout as a compromise solution for the intersection of Dockweiler Drive, Arch Street, and 12th Street, given the absence of a roundabout standard in the city of Santa Clarita.

Sincerely,

Name: Yolanda DeBoy

Address: 23556 Via Baron Valencia Ca

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. In light of this, I have some questions regarding the consideration for the residents of Placerita Canyon, as well as the safety and well-being of horses, livestock, and pets during evacuation emergencies. I would appreciate your response:

Has there been any assessment or planning regarding the evacuation procedures and protocols for the residents of Placerita Canyon in the event of an emergency, considering the potential increase in traffic due to the proposed lack of additional ingress and egress points?

Will there be clear and well-communicated evacuation routes and instructions for the residents of Placerita Canyon, particularly those with horses, livestock, and pets? How will these instructions be disseminated to ensure that everyone can evacuate safely and efficiently?

Has the impact of increased traffic during evacuation emergencies been considered in relation to the safety and welfare of horses, livestock, and pets in the Placerita Canyon area? Will there be specific measures or accommodations in place to address the needs of these animals during evacuations? Were they taken into the calculations presented by Pat Gibson? If so, how many horses and livestock trailers were calculated in the evacuation time?

Are there designated areas or facilities on the studio campus that can provide temporary shelter for horses, livestock, and pets in the event of an evacuation? If so, how will these facilities be communicated to the residents, and what capacity will they have to accommodate the animals? How large is the phantom dog park?

Will there be provisions or protocols for assisting residents in evacuating their horses, livestock, and pets, such as providing trailers or transportation support during emergencies?

How will emergency response personnel be trained and equipped to handle situations involving the evacuation of animals, including horses, livestock, and pets? Will there be coordination with animal control agencies and animal welfare organizations to ensure their involvement in emergency planning and response?

Will there be public education and awareness campaigns to inform residents of Placerita Canyon about the importance of emergency preparedness for their animals and the steps they can take to ensure their safety during evacuations?

How will the effectiveness of the evacuation procedures and the safety of animals during emergencies be monitored and evaluated? Will there be mechanisms in place to gather feedback from residents and address any concerns or areas for improvement?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the considerations for the residents of Placerita Canyon, horses, livestock, and pets during evacuation emergencies.

Sincerely,

Name: Linda Bradley

Address: 22432 13th St. Newhall 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding the potential for flooding in Placerita Canyon during heavy rain events. I would greatly appreciate your insights and responses to the following:

What measures have been taken to assess the risk of flooding in Placerita Canyon during heavy rain events? Has a comprehensive flood risk analysis been conducted to understand the potential impact on both the proposed Shadowbox Studios project and the surrounding areas?

What strategies and design considerations are being implemented to mitigate the risk of flooding in Placerita Canyon? Are there plans for proper drainage systems, retention basins, or other flood control measures to ensure the safety of residents, properties, and infrastructure during heavy rain events?

Has there been collaboration with relevant agencies, such as the Santa Clarita Valley Watershed Advisory Committee or the County Department of Public Works, to ensure that the flood risk in Placerita Canyon is adequately addressed? How will coordination and communication be maintained to address any potential flood-related issues that may arise?

Will the proposed development of Shadowbox Studios incorporate flood-resilient design features to minimize the impact of flooding? If so, what specific measures or design considerations will be implemented to protect the studio facilities, surrounding properties, and infrastructure from potential flood damage?

How will emergency response and evacuation plans be developed and implemented in the event of a flooding incident in Placerita Canyon? Are there established protocols in place to ensure the safety and well-being of residents, studio personnel, and the general public during such emergencies?

Has public input been sought to gather information about previous flooding incidents, concerns, and suggestions from residents of Placerita Canyon? How has this input influenced the planning commission's considerations and decision-making process regarding flood mitigation measures?

Are there any ongoing studies or future plans to address the long-term flood risk in Placerita Canyon, considering potential changes in weather patterns or climate conditions? How will the planning commission adapt and respond to evolving flood risk factors in the area?

I appreciate your attention to these questions and your efforts to address the potential flooding concerns in Placerita Canyon exasperated by Shadowbox. Your insights will help ensure the safety, well-being, and resilience of our community during heavy rain events.

Thank you for your time and consideration.

Sincerely,

Name: _____

Address: 26638 Mecham Ave

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have some questions regarding the aesthetics of the proposed Shadowbox Studios project and its compatibility with the rural and equestrian character of the Placerita Canyon community. I kindly request your insights and responses to the following:

What efforts have been made to ensure that the design and architectural elements of Shadowbox Studios align with the rural and equestrian aesthetics of Placerita Canyon? Has the project undergone a design review process to evaluate its visual impact and compatibility with the surrounding environment?

Are there specific design guidelines or requirements in place to ensure that the project's buildings, structures, and landscaping elements harmonize with the natural beauty of Placerita Canyon? How will the project's aesthetics enhance and complement the existing rural and equestrian character of the area?

Will there be any restrictions or regulations on the types of materials, colors, or architectural styles that can be used for the buildings within the Shadowbox Studios project? How will these guidelines contribute to creating a visually cohesive and appealing environment that blends with the surrounding community?

Has there been any consideration given to the visual impact of the project on the scenic vistas and viewpoints in Placerita Canyon and Circle J? Will there be efforts to preserve and enhance the existing views and natural landscapes during the construction and operation of the studio facilities?

How will the landscaping and open space design within the Shadowbox Studios project be implemented to ensure it complements the rural and equestrian character of Placerita Canyon? Are there plans for incorporating native vegetation, maintaining wildlife corridors, or preserving the existing vegetation to promote a visually pleasing and ecologically sustainable environment?

Has the community been involved in the discussion and decision-making process regarding the aesthetics of the project? How has their feedback and input influenced the planning commission's considerations and any design modifications made to ensure compatibility with the Placerita Canyon community?

Will there be ongoing monitoring and compliance measures in place to ensure that the aesthetics of Shadowbox Studios are maintained over time? How will any deviations or non-compliance with the approved design guidelines be addressed and rectified?

I appreciate your attention to these questions and your efforts to ensure that the aesthetics of the Shadowbox Studios project align with and enhance the rural and equestrian character of Placerita Canyon. Your insights will help maintain the visual appeal and integrity of our community.

Thank you for your time and consideration.

Sincerely,

Name: _____

Address: _____

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about if consideration was given to donating a portion of the Shadowbox Studios property to the City of Santa Clarita for the purpose of building a cultural center. The establishment of a cultural center can bring numerous benefits to the community, such as fostering arts and cultural activities, providing educational opportunities, and serving as a hub for community engagement.

Has there been any formal proposal or discussion regarding the allocation of a portion of the Shadowbox Studios property for the development of a cultural center? If so, what were the main considerations and motivations behind this proposal, and what progress has been made in the discussions with the studio project stakeholders? If not, would you consider as a condition of approval?

What potential benefits do you envision a cultural center would bring to the community and the city as a whole? Are there specific goals or objectives that the City of Santa Clarita aims to achieve through the establishment of a cultural center if Shadowbox Studios were to donate a portion of its property?

Have there been any assessments or studies conducted to evaluate the feasibility and suitability of incorporating a cultural center with the construction of the studio campus? Could factors such as land availability, infrastructure requirements, zoning considerations, and compatibility with the overall vision of the Shadowbox Studios project be taken into account?

If the allocation of a portion of the Shadowbox Studios property for a cultural center is being considered, how would the ownership, management, and funding of the cultural center be addressed? Are there any potential partnerships or collaborations with community organizations, non-profit entities, or private investors that have been explored?

Has there been any community input or engagement regarding the idea of a cultural center as a condition of approval for the Shadowbox Studios property? Were there any public forums, surveys, or consultations conducted to gather feedback and gauge the level of support from residents and stakeholders?

Are there any alternative proposals or potential locations within the city that have been evaluated for the establishment of a cultural center, apart from the Shadowbox Studios property? What were the main considerations and reasons for either pursuing or not pursuing those alternative options?

What steps, if any, are being taken to ensure that the cultural center, if established as a condition of approval, aligns with the broader cultural and artistic vision of the City of Santa Clarita? Could there be plans to incorporate various arts disciplines, community programs, and cultural initiatives within the proposed cultural center?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the consideration for a cultural center within the Shadowbox Studios property. Understanding the progress, motivations, and potential benefits associated with this proposal will provide valuable information regarding the future development plans for the studio project and the cultural landscape of Santa Clarita.

Sincerely,

Name: John Sanchez

Address: SCV Resident

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding wildfire safety in relation to the proposed Shadowbox Studios project, considering the historical wildfire incident in 1962 that destroyed Melody Ranch Studios in Placerita Canyon, the devastating Sand Fire in Sand Canyon, the horrific fire that destroyed Paradise, California in recent years, and so many more.

Has a comprehensive wildfire risk assessment been conducted for the proposed Shadowbox Studios project site? What are the specific findings and recommendations from this assessment in terms of mitigating the risk of wildfire in the area?

What measures will be implemented to ensure that the studios and surrounding facilities are designed and constructed with wildfire safety in mind? Will fire-resistant materials, landscaping practices, and building design guidelines be adopted to minimize the vulnerability of the structures to wildfire?

Are there plans for creating defensible space around the studios and other buildings on the site? How will vegetation management and fuel modification practices be implemented to reduce the risk of fire spread and improve the overall safety of the area?

Has there been collaboration and coordination with local fire departments and emergency response agencies to establish protocols for wildfire prevention, preparedness, and response in the vicinity of the Shadowbox Studios project? How will communication and coordination be maintained during wildfire events?

Will the project incorporate appropriate fire access roads and fire hydrants to ensure efficient emergency response in the event of a wildfire? What provisions are being made to facilitate safe evacuation for studio personnel, residents, and visitors during wildfire incidents?

Has the historical wildfire incident in 1962 that destroyed Melody Ranch Studios influenced the planning commission's considerations and decision-making process regarding wildfire safety for the Shadowbox Studios project? How will the lessons learned from that incident be applied to prevent a similar occurrence?

Will there be provisions for ongoing monitoring, maintenance, and updates of the wildfire safety measures implemented for the studios and the surrounding area? How will these measures be evaluated and adjusted over time to ensure continued effectiveness and adaptability to changing wildfire risk factors?

I appreciate your attention to these questions and your commitment to ensuring wildfire safety in the development of the Shadowbox Studios project. Your insights and efforts will contribute to the protection of life, property, and the natural environment in Placerita Canyon.

Thank you for your time and consideration.

Sincerely,

Name: Eric Chan

Address: SCV Resident

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding wildfire safety considerations in light of the presence of the proposed Shadowbox Studios in Placerita Canyon, particularly in reference to the 1962 firestorm that destroyed Melody Ranch Studios.

- Has a comprehensive wildfire risk assessment been conducted for the proposed Shadowbox Studios project and its surrounding area? What measures have been taken to evaluate the vulnerability of the site to wildfire incidents, considering the historical context of the 1962 firestorm?
- What specific fire prevention and mitigation strategies will be implemented to ensure the safety of the Shadowbox Studios facilities, neighboring properties, and the surrounding community? Will there be dedicated firebreaks, fuel management practices, or other measures to minimize the risk of fire spreading?
- Has there been coordination with local fire departments, such as the Los Angeles County Fire Department, to incorporate their recommendations and guidelines into the design and construction of the studios? How will emergency response and firefighting efforts be facilitated in the event of a wildfire incident in the area?
- Are there plans for the installation of fire detection and monitoring systems within the studios and the surrounding vicinity? How will early warning systems be implemented to ensure timely evacuation and response in the event of a wildfire threat?
- Will there be designated evacuation routes and plans in place to ensure the safe evacuation of studio personnel, residents, and visitors in the event of a wildfire emergency? How will these plans be communicated and practiced to ensure a swift and organized response?
- Are there any specific requirements or guidelines in place for landscaping and vegetation management on the Shadowbox Studios property to reduce fire risks? Will fire-resistant plant species and appropriate spacing be considered to minimize the potential fuel load?
- Has public input been sought to gather concerns and suggestions from residents and community members regarding wildfire safety measures associated with the proposed studio project? How have these perspectives influenced the planning commission's considerations and decision-making process in relation to fire prevention and response?

I appreciate your attention to these questions and your commitment to ensuring the safety and resilience of the Placerita Canyon community in the face of potential wildfire threats. Your insights will contribute to a well-prepared and fire-safe environment for the proposed Shadowbox Studios.

Sincerely,

Name: KIRK MULLINS

Address: SCV RESIDENT

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification regarding the potential consequences if the proposed Shadowbox Studios project does not receive approval from the Metropolitan Water District (MWD) for various aspects, including the use of their land for the north parking, emergency access route, secondary access to the north parking lot, and the use of their property for a greens nursery. I kindly request your insights on the following matters:

What specific roles or approvals are required from the Metropolitan Water District for the aforementioned aspects of the Shadowbox Studios project? Are these approvals critical for the project's overall feasibility and successful implementation?

Has the planning commission already engaged in discussions or negotiations with the Metropolitan Water District regarding the proposed land uses and access routes associated with the project? If so, what progress has been made in these discussions, and what are the main considerations and concerns raised by the Metropolitan Water District?

If the project fails to secure approval from the Metropolitan Water District for any of the mentioned aspects, how will this impact the overall feasibility and functionality of the Shadowbox Studios project? Are there alternative solutions or workarounds being explored to address the potential absence of these approvals?

Will the planning commission consider the approval of the Metropolitan Water District as a condition for granting approval to the Shadowbox Studios project? Are there any mechanisms in place to ensure that the necessary approvals are obtained before proceeding with the project to avoid any legal or logistical challenges?

If the approvals from the Metropolitan Water District are not obtained, what implications does this have for the project's compliance with relevant regulations and requirements? How will the project address any non-compliance issues or potential conflicts with local regulations?

Has the community and relevant stakeholders been informed about the potential impact of the Metropolitan Water District's approvals on the Shadowbox Studios project? Have there been any opportunities for public input or feedback regarding this matter?

Are there any alternative options or contingency plans being considered in case the approvals from the Metropolitan Water District cannot be obtained? How will these options be evaluated, and what criteria will be used to determine their feasibility and suitability for the project?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the potential consequences if the Shadowbox Studios project does not receive approval from the Metropolitan Water District for various aspects. Understanding the implications and any alternative plans will provide valuable information for assessing the project's viability and its adherence to regulatory requirements.

Sincerely,

Name: Joyce Broomer

Address: 21515 Placerita Cyn Rd #21 Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification regarding the potential impact of a zone change requirement for the proposed Shadowbox Studios project on the approved Dockweiler Drive Extension in the North Newhall Area. Considering that the current zoning allows for the extension, but the studio project requires a change due to differing land usage from the General Plan, I kindly request your response to the following questions:

If the Shadowbox Studios project necessitates a zone change due to its significant variance from the current General Plan, will this requirement have any implications for the approved Dockweiler Drive Extension? Will the extension need to be revisited or modified as a result of the zone change?

What other considerations or factors come into play when evaluating the relationship between the zone change requirement for the Shadowbox Studios project and the approved Dockweiler Drive Extension? How will the planning commission ensure that both developments can coexist harmoniously and fulfill their respective objectives?

Has the potential impact of the zone change requirement on the approved Dockweiler Drive Extension been thoroughly assessed and evaluated? Are there any specific studies, analyses, or consultations conducted to determine the viability and compatibility of the two projects?

If modifications or adjustments to the Dockweiler Drive Extension are necessary due to the zone change requirement, what would be the process for addressing these changes? Will there be opportunities for public input and consultation to ensure that the community's perspectives and concerns are taken into account?

Are there any alternative solutions or approaches that have been explored to address the zone change requirement while minimizing any potential impact on the approved Dockweiler Drive Extension? If so, what were these alternatives, and why were they not deemed suitable for the project?

What measures will be taken to ensure that any modifications or adjustments to the Dockweiler Drive Extension, if required, are carried out in a manner that considers the safety, efficiency, and functionality of the roadway for both the studio project and the surrounding community of Placerita Canyon?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the potential implications of a zone change requirement for the Shadowbox Studios project on the approved Dockweiler Drive Extension. Understanding the considerations and steps taken to address this relationship will provide valuable information regarding the future development plans and the overall planning process.

Sincerely,

Name: M J Crum

Address: 21536 Vanowen St Canoga Park CA 91303

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification on the potential implications and considerations regarding I am writing to seek clarification regarding the potential interplay between the approved Dockweiler Drive Extension and the proposed Shadowbox Studios project. Specifically, I am interested in understanding the implications of the required zone change for the studio project and its potential impact on the Dockweiler Extension. I kindly request your response to the following questions:

Considering that the Dockweiler Drive Extension was approved based on the current zoning in the North Newhall Area, will the proposed zone change for the Shadowbox Studios project necessitate the reopening of discussions regarding the Dockweiler Extension? How will the zone change affect the implementation and functionality of the extension? How will residents of Placerita Canyon be affected?

What other considerations come into play when a zone change is required for the proposed Shadowbox Studios project? Are there specific criteria or conditions that need to be met before the zone change can be granted, and how does this impact the overall planning process?

Will the zone change and its potential impact on the Dockweiler Extension be evaluated as part of the environmental review process for the Shadowbox Studios project? If not, can they be as a condition of approval? Are there any studies or assessments planned to assess the compatibility and feasibility of the proposed zone change and its relation to the approved extension along with impacts to the surrounding community?

Are there any alternative solutions or approaches being considered to ensure the compatibility and functionality of both the proposed Shadowbox Studios project and the Dockweiler Extension, considering the required zone change? How will any potential conflicts or challenges be addressed during the planning and implementation stages?

What level of coordination and collaboration is taking place between the relevant stakeholders, such as the City of Santa Clarita, the planning commission, and the project developers, and PCPOA to ensure a cohesive and integrated approach that considers the implications of the required zone change on the Dockweiler Extension?

Thank you for taking the time to address these questions. Your insights and clarification regarding the interplay between the approved Dockweiler Drive Extension and the proposed zone change for the Shadowbox Studios project will provide valuable information about the planning process and potential considerations in ensuring the successful integration of both developments.

Sincerely,

Name: James Reick

Address: 19216 Friendly Valley Newhall 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification on the potential implications and considerations regarding the Dockweiler Drive Extension in relation to the approval of the proposed Shadowbox Studios project. It has come to my attention that the Dockweiler Drive Extension was approved based on the current zoning in the North Newhall Area, while Shadowbox Studios, if approved, would require a zone change due to the significant difference in land usage from what is currently allowed in the General Plan. In light of this, I kindly request your response to the following questions:

If the proposed Shadowbox Studios project receives approval and necessitates a zone change, will this require the Dockweiler Drive Extension to be reopened? Are there any specific conditions or requirements associated with the extension's approval that may be affected by the zone change?

What other considerations come into play when evaluating the impact of the zone change for the Shadowbox Studios project? Are there any potential effects on the surrounding infrastructure, transportation network, or community development plans that need to be taken into account?

How does the requirement for a zone change align with the broader vision and goals of the North Newhall Area? Are there any potential challenges or conflicts that may arise from the proposed change in land usage, and how will they be addressed during the planning and approval process?

Will there be any additional studies, assessments, or evaluations conducted to analyze the potential impacts of the zone change and the proposed Shadowbox Studios project on the surrounding area? If so, what specific factors will be assessed, and how will the findings be integrated into the decision-making process?

Has there been any community input or engagement regarding the proposed zone change and its relationship to the Dockweiler Drive Extension? Were any public meetings, workshops, or consultations held to gather feedback and address concerns from residents and stakeholders?

Are there any alternative solutions or approaches being considered that would allow for the approval of the Shadowbox Studios project without requiring a zone change? If so, what are these alternatives, and what factors are being taken into account when evaluating their feasibility and suitability?

Thank you for taking the time to address these questions. I appreciate your insights and clarification regarding the potential implications of the zone change for the Shadowbox Studios project and the Dockweiler Drive Extension. Understanding the relationship between these two aspects will provide valuable information for the decision-making process and the overall development plans in the North Newhall Area.

Sincerely,

Name: Felix De Bee

Address: 23556 Via Batta Valencia CA 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I have several questions regarding wildfire safety in light of the presence of the proposed Shadowbox Studios in Placerita Canyon. Given the historical context of the 1962 firestorm that destroyed Melody Ranch Studios, I kindly request your insights and responses to the following:

What measures will be implemented to ensure the wildfire safety of the Shadowbox Studios and the surrounding areas? Has a comprehensive fire risk assessment been conducted to identify potential vulnerabilities and develop appropriate mitigation strategies?

Will the design and construction of the studios incorporate fire-resistant materials and construction techniques to minimize the risk of ignition and spread during a wildfire event? How will the studios be equipped with fire suppression systems to enhance their resilience in the face of wildfire threats?

Has there been collaboration with local fire departments and emergency services to develop an effective emergency response plan specific to the Shadowbox Studios project? How will coordination and communication be maintained during a wildfire incident to ensure the safety of studio personnel and the surrounding community?

Are there plans for the establishment of defensible space around the studios, including appropriate clearance of vegetation and the implementation of fuel modification strategies? How will the maintenance of defensible space be ensured to prevent the accumulation of flammable materials?

Will there be mandatory fire safety training and education programs for studio staff, contractors, and tenants to promote fire awareness and preparedness? How will fire drills and evacuation procedures be regularly practiced and updated?

Has the impact of the Shadowbox Studios on evacuation routes and emergency access to Placerita Canyon been considered? Are there plans for improving evacuation routes or establishing alternative emergency access points to ensure the safe evacuation of studio personnel and residents during a wildfire event?

Has public input been sought to gather concerns, suggestions, and experiences related to wildfire safety in Placerita Canyon? How have these perspectives influenced the planning commission's considerations and decision-making process regarding fire risk mitigation strategies for the Shadowbox Studios project?

I appreciate your attention to these questions and your commitment to wildfire safety in the planning and development of the Shadowbox Studios project. Your insights will contribute to a safer and more resilient community in the face of wildfire threats.

Sincerely,

Name: Jon Lo

Address: SCV Resident

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to address the potential utilization of the flyover Via Princessa bridge and to further inquire about the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the proposed Shadowbox Studios project. It has been suggested that these solutions could collectively help alleviate traffic congestion at the Arch and 13th intersection, as well as enhance the overall traffic flow in the area. As it currently stands, ALL traffic must enter at the Arch and 13th Street intersection. I kindly request your insights and clarification on the following points:

Has the planning commission considered the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios project in conjunction with the utilization of the flyover Via Princessa bridge? Could this combined approach significantly alleviate traffic congestion and improve traffic flow at the Arch and 13th intersection?

What are the main benefits and challenges associated with implementing both a secondary entrance from Circle J and utilizing the flyover Via Princessa bridge? Are there any specific technical, engineering, or regulatory considerations that need to be evaluated to ensure the successful integration of these solutions?

Have any comprehensive traffic impact studies or assessments been conducted to analyze the potential effects of diverting vehicles through a secondary entrance from Circle J and utilizing the flyover Via Princessa bridge? How were these findings considered in the planning process, particularly in relation to traffic congestion at the Arch and 13th intersection?

Are there any ongoing discussions or plans to explore the feasibility of integrating a secondary entrance from Circle J and utilizing the flyover Via Princessa bridge into the overall transportation infrastructure plan for the Santa Clarita area? If not, would the planning commission be open to considering such options to address the current and future traffic concerns in the vicinity?

How would the establishment of a secondary entrance from Circle J and the utilization of the flyover Via Princessa bridge impact the overall transportation network in the area? Have there been any assessments conducted to determine the compatibility of these solutions with existing traffic patterns, roadways, and future developments in the vicinity?

Are there any specific conditions or restrictions that would need to be imposed if a secondary entrance from Circle J and the utilization of the flyover Via Princessa bridge were implemented to mitigate potential negative impacts or safety concerns?

Thank you for your attention to these expanded questions. Your insights and clarification regarding the feasibility of a secondary entrance from Circle J, in combination with the utilization of the flyover Via Princessa bridge, will provide valuable information to evaluate potential solutions for traffic congestion and improve transportation in the Santa Clarita area.

Sincerely,

Name: Renee Caballero

Address: 24413 Leonard Tree Ln. #204

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification on the potential ramifications if the proposed Shadowbox Studios project does not receive approval from the Metropolitan Water District (MWD) for various aspects, namely (a) the use of MWD land for the north parking, (b) the emergency access route, (c) a possible secondary access to the north parking lot, and (d) the use of MWD property for a nursery to mitigate the impact on Alderbrook neighbors. I kindly request answers on the following matters:

What implications would arise if Shadowbox Studios does not receive approval from the Metropolitan Water District for the aforementioned land uses? Would the denial of such approvals significantly impact the feasibility and implementation of the project?

Has the planning commission considered the approval from the Metropolitan Water District as a condition for granting approval to the Shadowbox Studios project? Are there provisions or considerations in place to ensure that the necessary approvals from the MWD are obtained before proceeding with the proposed development?

If the approvals from the Metropolitan Water District are indeed considered as a condition for project approval, what mechanisms or processes are in place to monitor and verify the attainment of these approvals? Will there be a requirement for the applicant to provide evidence of approval from the MWD before the project can move forward?

Have there been any discussions or negotiations between the Shadowbox Studios project stakeholders, the City, and the Metropolitan Water District regarding the land uses in question? If so, what progress has been made in obtaining the necessary approvals, and what are the main points of contention or considerations that need to be addressed?

If the approvals from the Metropolitan Water District are not secured, what alternative solutions or mitigation measures are being explored to address the absence of north parking, emergency access routes, secondary access to the north parking lot, and the nursery for buffering impact on Alderbrook neighbors? Are there contingency plans or alternative arrangements being considered to ensure the project can proceed without reliance on MWD land?

Has there been any community input or engagement regarding the potential impact of not receiving the necessary approvals from the Metropolitan Water District? Were there any public forums, surveys, or consultations conducted to gather feedback and gauge the level of concern or support from residents and stakeholders in relation to this matter?

What steps, if any, are being taken to actively pursue the approvals from the Metropolitan Water District to secure the land uses required for the Shadowbox Studios project? Are there ongoing efforts to collaborate and work towards a resolution that satisfies the requirements and concerns of both the project stakeholders and the MWD?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the potential implications of not receiving the necessary approvals from the Metropolitan Water District for the various land uses associated with the Shadowbox Studios project. Understanding the progress, considerations, and alternative measures being explored will provide valuable information regarding the future development plans and the overall feasibility of the project.

Sincerely,

Name: Michael W. Bennett

Address: 21515 Placerita Canyon Road #31 Santa Clarita, CA. 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential requirement for an additional ingress and egress to the studio campus. I have several questions regarding this matter and would appreciate your response:

Could you please explain the reasoning behind the absence of discussion regarding the need for an additional ingress and egress to the Shadowbox Studios campus? What factors were considered to conclude that no additional access point is necessary?

Has a comprehensive traffic impact analysis been conducted to evaluate the potential effects of the proposed ingress and egress on the surrounding roadways? If so, what were the findings of this analysis and how were they considered during the planning process? Specifically, I noticed congestion on Railroad Avenue in the simulation presented during the May 16th Planning Commission meeting. How will this be addressed? What is the simulation's impact during the passing of a freight train (average 8 per day in 2017)?

How does the inclusion of an additional ingress and egress align with the broader transportation infrastructure plan for the Santa Clarita area? Does it harmonize with existing traffic patterns and roadways, or would it necessitate substantial modifications to the surrounding transportation network?

What measures will be taken to ensure that any new ingress and egress points are designed to minimize traffic congestion and prioritize safety for both studio personnel and the general public?

Are there any provisions or plans to enhance public transportation options to and from the Shadowbox Studios campus, considering the potential increase in traffic associated with the project?

Has the community been consulted or engaged in the decision-making process regarding the necessity of an additional ingress and egress? If so, what feedback has been received from residents and local businesses, and how has it influenced the planning commission's considerations?

Have alternative solutions or approaches been explored to address traffic concerns without requiring a new ingress and egress? If so, what were these alternatives, and why were they not deemed suitable for the project?

Will specific conditions or restrictions be imposed on the use of any new ingress and egress points to mitigate potential negative impacts? For instance, will there be limitations during peak traffic hours or the implementation of traffic control measures?

How will the effectiveness of the new ingress and egress points be monitored and evaluated once they are operational? Will mechanisms be in place to address unforeseen issues or make necessary adjustments?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the potential need for additional ingress and egress requirements.

Sincerely, Basilio Zamora

Name: Basilio Zamora

Address: 24742 N. Meadview Ave Newhall, Ca 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I would like to inquire about the removal and relocation of oak trees from the proposed Shadowbox Studios project site. I would appreciate your insights and responses to the following:

How many oak trees are currently present on the project site, and what is the proposed plan for their removal or relocation? Has an inventory of the oak trees been conducted to assess their health, age, and ecological significance?

What criteria will be used to determine which oak trees will be removed and which will be relocated? Will efforts be made to prioritize the preservation of older, healthier, or more significant oak trees?

If relocation is proposed for some oak trees, what is the plan for their successful transplantation? Will a certified arborist or tree relocation expert be involved to ensure the proper techniques are used to minimize stress and maximize the survival rate of the transplanted trees?

Has there been consideration given to the impact of oak tree removal on the overall ecosystem and biodiversity of the project site? What mitigation measures are planned to compensate for any loss of habitat or potential impact on wildlife that rely on these oak trees?

Will there be any provisions or conditions of approval to ensure that replacement trees are planted as part of the project? If so, what species of trees will be selected, and what guidelines will be followed to ensure their successful establishment and long-term growth?

How will the removal or relocation of oak trees be coordinated with relevant environmental agencies and organizations to ensure compliance with applicable regulations and best practices for tree conservation?

Has public input been sought to gather concerns and suggestions regarding the removal or relocation of oak trees? How has this input influenced the planning commission's considerations and decision-making process regarding the protection and preservation of these valuable natural resources?

I appreciate your attention to these questions and your commitment to the responsible management of oak trees within the proposed Shadowbox Studios project. Your insights will help ensure the conservation of our local ecosystems and the preservation of our natural heritage.

Sincerely,

Name: Emma Young

Address: SCV Resident

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about whether consideration has been given to allocating a portion of the Shadowbox Studios property to the City of Santa Clarita for the purpose of building a cultural center. This could serve as a valuable asset to the community and enhance the cultural offerings in the area. I

Has there been any discussion or consideration given to allocating a portion of the Shadowbox Studios property to the City of Santa Clarita for the development of a cultural center? If so, what factors were taken into account during the planning process, and what is the current status of these discussions?

Thank you for your attention to this question. I look forward to your insights and clarification regarding the consideration for a cultural center outside the Shadowbox Studios perimeter.

Sincerely,

Name: [illegible]

Address: SCV Resident

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the potential requirement for the studio project to make a cash donation to the Placerita Canyon Property Owners Association (PCPOA) as a condition of approval, with the intention of furthering preservation efforts within the canyon. I would appreciate your insights and response to the following questions:

In considering the potential requirement for a cash donation to the PCPOA, what specific factors would be taken into account to determine the appropriate amount? Would there be a methodology or criteria established to ensure that the donation adequately supports preservation efforts and the nonprofit's mission and aligns with the scale and impact of the proposed studio project?

Has the potential requirement for a cash donation to the PCPOA been discussed with the studio project applicant? What has been their response or position regarding this condition of approval? Are there any alternative proposals or mitigation measures that have been put forth by the applicant to address preservation concerns within the canyon?

What role does the Placerita Canyon Property Owners Association play in the decision-making process regarding the potential cash donation requirement? How would the association's expertise, input, and guidance be incorporated into determining the amount and utilization of the donation?

Has there been any analysis or assessment conducted to evaluate the potential impact and effectiveness of a cash donation in supporting preservation within the canyon? Are there any examples or precedents where similar donations have been implemented successfully in other projects to enhance conservation efforts and maintain the integrity of natural areas?

How would the potential cash donation requirement be communicated to the public and other stakeholders? What mechanisms would be in place to ensure transparency and accountability in the decision-making process?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the potential requirement for the studio project to make a cash donation to the Placerita Canyon Property Owners Association as a condition of approval, aimed at supporting preservation within the canyon.

Sincerely,

Name: Jeffrey Dean

Address: 21224 Placerita Cyn Rd
Newhall, CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the established speed limits on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street in relation to the proposed Shadowbox Studios project. Additionally, I am interested in understanding the considerations given to equestrian, pedestrian, and golf cart vehicles that share these roadways. I would appreciate your response to the following questions:

What are the established speed limits for Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street? Have there been any recent changes or updates to the speed limits in these areas?

Were there specific considerations taken into account when establishing the speed limits for these roadways to ensure the safety of equestrian riders, pedestrians, and golf cart users who share the same space?

Has there been an assessment conducted to evaluate the suitability of the established speed limits for accommodating equestrian, pedestrian, and golf cart traffic on these roadways? What factors were considered in determining the appropriate speed limits to balance the needs of different road users?

Are there any designated equestrian lanes, pedestrian pathways, or separate golf cart lanes planned or implemented along these roadways to enhance safety and promote the coexistence of various modes of transportation?

What safety measures or infrastructure improvements, if any, are planned or in place to protect equestrian riders, pedestrians, and golf cart users along Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street?

Have there been any community consultations or input from equestrian organizations, pedestrian advocates, or golf cart users regarding the speed limits and safety considerations on these roadways? If so, how have these perspectives influenced the decision-making process?

Will there be ongoing monitoring and evaluation of the road safety conditions and the effectiveness of the established speed limits in accommodating equestrian, pedestrian, and golf cart traffic? How will any identified issues or concerns be addressed and mitigated?

Are there plans for public education and awareness campaigns to inform residents, visitors, and drivers about the presence of equestrian riders, pedestrians, and golf cart users on these roadways and to promote safe and respectful interactions between different road users?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the established speed limits and considerations for equestrian, pedestrian, and golf cart vehicles on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street.

Sincerely,

Name: Julian Zamora

Address: 21233, placerita canyon

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the established speed limits on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street, as well as the considerations given for equestrian, pedestrian, and golf cart vehicles that share those roadways. I would appreciate your response to the following questions:

What are the established speed limits on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street? Have these speed limits been determined based on standard traffic engineering practices and considerations for road safety?

Have there been any specific considerations given to equestrian traffic on these roadways, such as horseback riders or horse-drawn carriages? How will the speed limits and road design accommodate the safety and needs of equestrian users?

Are there designated equestrian lanes or paths along Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street to separate equestrian traffic from motor vehicle traffic? If not, what measures will be in place to ensure the safety of equestrian users?

What measures have been taken to ensure the safety of pedestrians and provide appropriate infrastructure, such as sidewalks or pedestrian crossings, along these roadways?

Are there any designated golf cart lanes or paths planned for Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street to accommodate golf cart traffic? If so, how will the speed limits and road design consider the presence of golf carts?

Have traffic calming measures, such as speed humps or roundabouts, been considered or implemented on these roadways to enhance safety for all users, including equestrian, pedestrian, and golf cart traffic?

Will there be educational initiatives or awareness campaigns to inform drivers about the presence of equestrian, pedestrian, and golf cart traffic on these roadways and promote safe interactions and responsible driving practices?

How will the effectiveness of the established speed limits and safety measures be monitored and evaluated? Will there be mechanisms in place to address any identified safety concerns or make adjustments as needed?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the established speed limits and considerations for equestrian, pedestrian, and golf cart vehicles on Dockweiler Drive, Placerita Canyon Road, 13th Street, Arch Street, and 12th Street.

Sincerely,

Name: Viviana Zamora

Address: 21233 placerita cyn.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the presence of a morality clause as a condition of approval for the Shadowbox Studios project, specifically addressing the prohibition of pornography production within the studio facilities. I understand the importance of upholding community standards and values, and I would appreciate your response to the following questions, which aim to gain a better understanding of the considerations and provisions in place:

Has there been any discussion or consideration regarding the inclusion of a morality clause in the conditions of approval for the Shadowbox Studios project to explicitly prohibit the production of pornography within the studio facilities? If so, what factors were taken into account in determining whether such a clause should be included or excluded?

If a morality clause is indeed being considered, how would it be defined and implemented? What criteria or guidelines would be used to determine what constitutes pornography production and ensure clarity in enforcing the clause?

Has the potential presence of a morality clause been discussed with the studio developers or any relevant parties involved in the Shadowbox Studios project? If so, what have been their reactions or responses to the idea?

Are there any legal or constitutional considerations that need to be taken into account when considering the inclusion of a morality clause? Has legal counsel been consulted to ensure that any proposed clause aligns with applicable laws and regulations?

If a morality clause is included as a condition of approval, how will compliance be monitored and enforced? What mechanisms will be in place to address any violations or disputes that may arise?

Has the community been consulted or involved in discussions regarding the potential inclusion of a morality clause? What feedback, if any, has been received from residents and local businesses regarding this matter?

Are there any precedents or examples from other similar projects or jurisdictions where a morality clause has been included to regulate the types of content produced within studio facilities? If so, what have been the outcomes and effectiveness of such clauses?

In the absence of a morality clause, what existing regulations or laws would govern the types of content that can be produced within the Shadowbox Studios facilities? Are there any limitations or restrictions already in place to ensure the responsible and lawful use of the studio space?

Thank you for your attention to these questions. I believe that addressing these concerns regarding a potential morality clause will contribute to a clearer understanding of the conditions and provisions associated with the Shadowbox Studios project.

Sincerely,

Name: Ed Morell

Address: 21213 Placerita Cyn Rd Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concerns regarding the lack of evacuation routes for residents of Placerita Canyon and the potential risks this poses in the event of a disaster, similar to the tragic events experienced by the residents of Paradise, California during the 2018 Camp Fire. I kindly request your insights and clarification on the following matters:

What evacuation routes are currently in place for residents of Placerita Canyon in the event of a disaster, such as a wildfire or other emergencies? Are there multiple routes available, and do they provide sufficient capacity to safely evacuate all residents in a timely manner? Same question for personnel on the Shadowbox site.

Has there been a comprehensive assessment of the potential risks and challenges associated with evacuating Placerita Canyon in the event of a large-scale emergency? If so, what were the findings of this assessment, and how have they influenced the planning and preparedness efforts for the area?

Are there any plans or initiatives in progress to establish additional evacuation routes or improve existing ones to enhance the safety and resilience of Placerita Canyon residents? If not, what considerations are being given to address this significant concern?

Has the planning commission taken into account the experience of the Paradise, California wildfire and its impact on the community's evacuation capabilities? Are there any lessons learned from that tragedy that are being applied to the planning and preparedness efforts in Santa Clarita, particularly in areas like Placerita Canyon?

What coordination and collaboration efforts are being undertaken between the City of Santa Clarita, emergency response agencies, and other relevant stakeholders to address the potential evacuation challenges faced by Placerita Canyon residents? Are there ongoing discussions or initiatives to ensure that residents have access to safe and efficient evacuation routes during emergencies?

Are there any plans to increase awareness among Placerita Canyon residents about emergency preparedness and evacuation procedures? How is the planning commission and the city working to educate and inform residents about the importance of being prepared for potential disasters and understanding evacuation protocols?

Is there an emergency management plan in place that specifically addresses the evacuation needs and considerations for Placerita Canyon residents? If so, could you provide an overview of the key elements of this plan and the steps taken to ensure its effective implementation?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the lack of evacuation routes for Placerita Canyon residents and the potential risks associated with this situation. Understanding the measures being taken to address these concerns will contribute to the safety and well-being of the community.

Sincerely,

Name: Mary Pelgrin

Address: 24711 Golden Oak Ln

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express further concerns regarding the negative impact that the proposed Shadowbox Studios project could have on the evacuation routes for residents of Placerita Canyon. Specifically, the addition of approximately 3,000 vehicles and trucks associated with the studio could potentially exacerbate the challenges faced by residents during emergency evacuations. Improper planning doomed residents of Paradise, California in the 2018 Camp Fire. I kindly request your insights and clarification on the following matters:

Has there been a comprehensive analysis of the potential impact of the proposed Shadowbox Studios project on the existing evacuation routes for Placerita Canyon residents? Specifically, has the increased traffic volume and the presence of additional vehicles and trucks associated with the studio been taken into consideration?

Are there any specific measures or plans in place to mitigate the potential negative impact of the additional vehicles and trucks from the Shadowbox Studios project on the evacuation routes? If so, could you provide details on these measures and how they would ensure the safety and timely evacuation of residents during emergencies?

Has there been any assessment of the capacity and suitability of the existing evacuation routes to accommodate the increased traffic resulting from the Shadowbox Studios project? Are there any plans to expand or enhance the evacuation routes to ensure they can effectively handle the additional vehicles and trucks?

What coordination and collaboration efforts are being undertaken between the City of Santa Clarita, emergency response agencies, and Shadowbox Studios to address the potential impact on evacuation routes and ensure the safety of both residents and studio personnel during emergency situations?

Are there any plans or discussions to explore alternative evacuation routes or create dedicated emergency access roads that would separate the evacuation traffic from the traffic generated by the studio? If so, what progress has been made in these discussions, and how would these alternative routes be integrated into the overall evacuation plans?

How are the concerns and feedback of Placerita Canyon residents being taken into account in the planning and decision-making process? Have their concerns regarding the potential negative impact of the Shadowbox Studios project on evacuation routes been acknowledged and addressed?

Is there an ongoing monitoring and evaluation process in place to assess the effectiveness of the evacuation routes and the ability to handle the increased traffic volume resulting from the Shadowbox Studios project? How would any issues or deficiencies in the evacuation routes be identified and addressed in a timely manner?

Thank you for your attention to these additional concerns. I greatly appreciate your insights and clarification regarding the potential negative impact of the Shadowbox Studios project on evacuation routes and the measures being taken to ensure the safety and well-being of Placerita Canyon residents during emergencies.

Sincerely,

Name: LeAnn Belgau

Address: 24711 Golden Oak Ln.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concerns regarding the deficiencies in the Draft Environmental Impact Report (DEIR) for the Shadowbox Studios project, specifically related to the lack of consideration for land use and planning in Placerita Canyon. I believe it is crucial for the planning commission to acknowledge these deficiencies and provide city staff and consultants with the necessary resources to conduct a comprehensive Land Use and Planning study. I kindly request your attention to the following points:

The proposed voting district map designates Placerita Canyon residents in a minority district. Given its proposed minority status, it is essential to conduct a thorough study to assess the potential impacts of the Shadowbox Studios project on these residents. Has the planning commission recognized the need for a Land Use and Planning study to evaluate the project's effects on the land use patterns and planning considerations specific to Placerita Canyon?

The Draft EIR lists farm equipment as an example of an incompatible land use. As the roads surrounding Placerita Canyon are shared by tractors, horses, golf carts, pedestrians, and other types of livestock, it becomes evident that a comprehensive assessment of land use compatibility is necessary. Has the planning commission recognized the importance of conducting a Land Use and Planning study to address these potential conflicts and ensure the safety and coexistence of different modes of transportation and land uses?

How does the planning commission plan to address the deficiencies in the Draft EIR regarding the lack of consideration for land use and planning? Will there be an opportunity to conduct a supplemental analysis or update the EIR to include the necessary studies and evaluations? What steps will be taken to ensure that the project is thoroughly assessed in terms of its impact on land use patterns, planning considerations, and the safety of all road users in the Placerita Canyon area?

Has there been any community input or feedback regarding the deficiencies in the Draft EIR and the need for a comprehensive Land Use and Planning study? If so, how has this input been taken into account by the planning commission, and what actions are being considered to address these concerns?

Will the planning commission provide city staff and consultants with the necessary resources, time, and support to conduct a thorough Land Use and Planning study for the Shadowbox Studios project? How will the planning commission ensure that the study is comprehensive, objective, and considers all relevant factors, including land use compatibility, planning considerations, and the unique characteristics of Placerita Canyon?

I appreciate your attention to these matters and urge the planning commission to acknowledge the deficiencies in the Draft EIR and prioritize the conduct of a Land Use and Planning study. Addressing these concerns will help ensure a thorough evaluation of the project's impacts and promote the well-being and safety of the Placerita Canyon community. Thank you for your commitment to transparent and comprehensive decision-making processes.

Sincerely,

Name: Pamela L. Mello

Address: 24763 Golden Oak Lane Newhall, Ca 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the omission of the study on land use in the Draft Environmental Impact Report (EIR) for the Shadowbox Studios project. It has come to my attention that the EIR mentions farm equipment as an example of incompatible land use, and I would like to understand the reasoning behind the exclusion of this study.

Why was the study on land use not included in the Draft EIR for the Shadowbox Studios project? Given that the EIR acknowledges farm equipment as an example of incompatible land use, it seems necessary to assess the potential impacts on the roads in and around Placerita Canyon that are shared by tractors, horses, golf carts, pedestrians, and other types of livestock.

What considerations were made in determining that the study on land use was not required for the project? Were there specific criteria or guidelines that influenced this decision, and were they consistent with the requirements outlined in the California Environmental Quality Act (CEQA) or other relevant regulations?

Have there been any assessments or analyses conducted to evaluate the potential conflicts or safety concerns arising from the shared use of roads by various modes of transportation, including farm equipment, equestrian activities, pedestrians, and other forms of livestock? If so, what were the findings of these assessments, and how have they been taken into consideration during the planning process?

Is there a plan in place to address any potential conflicts or safety issues related to incompatible land use and the shared use of roads surrounding Placerita Canyon? Are there measures being considered to ensure the safe coexistence of different modes of transportation, including the implementation of appropriate signage, road markings, designated lanes, or speed restrictions?

Have community members, residents, or relevant stakeholders expressed concerns regarding the potential conflicts arising from incompatible land use and the shared use of roads? If so, what feedback has been received, and how has it influenced the planning commission's considerations and decision-making process?

Will there be any provisions or conditions imposed on the Shadowbox Studios project to mitigate the potential conflicts or safety risks associated with incompatible land use? Are there plans to incorporate infrastructure improvements or design considerations that promote safe and efficient transportation for all users, taking into account the diverse modes of transportation in the area?

Is there an opportunity to conduct a supplemental analysis or update the Draft EIR to address the omission of the study on incompatible land use? If so, how will the planning commission ensure that all necessary studies and analyses are conducted to adequately assess the potential impacts of the project and comply with relevant environmental regulations?

Thank you for your attention to these inquiries. I greatly appreciate your insights and clarification regarding the exclusion of the study on incompatible land use in the Draft EIR for the Shadowbox Studios project. Understanding the rationale and any potential actions to address this omission will provide valuable information for assessing the project's compatibility with the existing land use patterns and ensuring the safety of all who use the roads.

I look forward to your response.

Sincerely,

Name: Russell L Mullen

Address: 24763 Golden Oak Lane - Newhall, Ca 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification regarding the absence of a study on land use in the Draft Environmental Impact Report (EIR) for the proposed Shadowbox Studios project. Specifically, I am interested in understanding why the potential impact of incompatible land uses, such as farm equipment, was not thoroughly examined in the environmental documents, as per CEQA.

Could you please provide an explanation as to why the issue of incompatible land use was not specifically studied in the Draft EIR for the Shadowbox Studios project? What were the factors or considerations that led to the omission of this topic from the environmental analysis?

Considering that the surrounding roads in the Placerita Canyon area are shared by various modes of transportation, including tractors, horses, golf carts, pedestrians, and other types of livestock, what measures were taken to assess the potential conflicts and impacts arising from incompatible land uses?

Was there any consideration given to the potential safety hazards or conflicts that may arise from the coexistence of different modes of transportation, including the operation of farm equipment, within the project area? If so, what were the findings and conclusions drawn from these considerations?

Has the issue of incompatible land use been raised by the community or relevant stakeholders during the public review process for the Shadowbox Studios project? If so, what concerns or feedback have been expressed, and how have these concerns been addressed or incorporated into the planning commission's considerations?

In light of the shared use of roads by various transportation modes, what steps will be taken to ensure the safety and well-being of all road users, including tractors, horses, golf carts, pedestrians, and other types of livestock, particularly in relation to the potential increase in traffic associated with the studio project?

Are there any plans or provisions to designate specific road sections or infrastructure improvements to accommodate the diverse range of transportation modes and ensure compatibility between different users?

Moving forward, what strategies or mitigation measures will be implemented to address any potential conflicts arising from incompatible land uses and ensure the safe coexistence of different modes of transportation within the project area?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the absence of a study on incompatible land use in the Draft EIR for the Shadowbox Studios project. Understanding the considerations and any measures to address potential conflicts will provide valuable information for assessing the project's impact on the surrounding transportation network and the safety of all road users.

I look forward to your response.

Sincerely, Sharon Campbell

Name: Sharon A. Mecton

Address: 24763 Golden Oak Lane Newhall, CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

To the Santa Clarita Planning Commission,

I previously submitted a comment at the May 16, 2023 public hearing. This is a follow-up to those remarks. I referenced an article that published in the Los Angeles Business Journal on May 1, 2023, titled "Lights! Camera! Soundstages!" The front page, above-the-fold article (attached to this letter) took an in-depth look into what seems to be explosive growth throughout the LA Metro area and San Fernando Valley for the construction of new state-of-the-art studios.

There was no mention of Shadowbox Studios nor any Santa Clarita-based studio for that matter. There may be a reason for that. While technically in the 30-mile zone, producers still consider Santa Clarita too far to travel for most cast and crew. As a retired studio executive, I know this first-hand. There are exceptions, such as NCIS, which was one of my shows when I was at CBS Studios. Twenty years ago, space was not available in the Los Angeles region, so we came to Valencia converting multiple warehouses to soundstages and creating our own studio campus. To this day many of their workers – above and below the line – live and commute from the westside, Santa Monica, and Long Beach to name a few areas.

Understand when you hear there will be "local" employment, that is actually "Local" with a capital L, as in unions. Major studios are signatories to the collective bargaining agreements of the Association of Motion Picture and Television Producers (AMPTP). I was on the negotiating team of AMPTP for years in my capacity as a labor negotiator representing Paramount Pictures then later CBS Studios. I also spent 18 years with the Screen Actors Guild, so I understand both sides. If Shadowbox is unable to attract major studios to their rental facilities, then they will be required to attract smaller independents who may or may not be signatories to the collective bargaining agreements. If productions are not signatories, the city should be prepared for picketers outside the studio gate as they attempt to 'flip' a production and convert them to a union show.

This is not to say there won't be some economic benefit or local employment in Santa Clarita, but don't fool yourself in thinking all those jobs and money will stay here locally. Bottom line, Shadowbox touts its proposed facility as LA Metro. It is not. Some Santa Clarita influencers call us "Hollywood North" but that doesn't mean studios and production teams buy into the hype. It may have worked for Awesometown but it remains to be seen if it will work for Santa Clarita.

Sincerely,

Name: 

Address: 24760 Oakcrest Ave, Newhall 91321

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LOS ANGELES BUSINESS JOURNAL

Vol. 45, No. 18 — THE COMMUNITY OF BUSINESS™ — May 1 - 7, 2023 - $5.00

GoodRx Demotes Its Co-Founders

HEALTH CARE: Firm brings in interim CEO.

By HOWARD FINE *Staff Reporter*

Santa Monica-based prescription drug comparison price and discount platform **GoodRx Holdings Inc.** late last month abruptly ousted its co-founders as co-chief executives and brought in an internet tech veteran as interim chief executive.

Wagner

GoodRx announced after market close on April 25 that **Trevor Bezdek** and **Doug Hirsch**, who co-founded the company in 2011, had been stripped of their co-chief executive titles; Bezdek was named chairman and Hirsch "chief mission officer."

Scott Wagner, who for eight years served as a top executive at Tempe, Arizona-based internet domain registration service **GoDaddy Inc.**, was named interim chief executive while a search for a permanent replacement gets under way.

The chief executive transition came without warning, though it follows a challenging year for GoodRx, as a major grocery chain pharmacy operator temporarily stopped

Please see HEALTH CARE page 43

LIGHTS! CAMERA! SOUNDSTAGES!

Production complexes are all the rage, layoffs be damned.

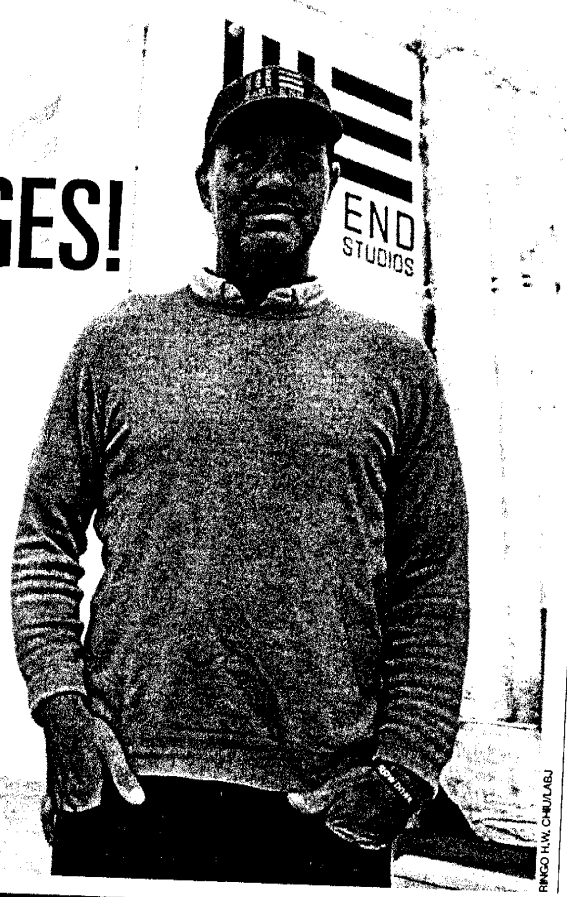
By MICHAEL AUSHENKER
Staff Reporter

Despite job cuts across the entertainment industry, the development of production facilities is booming in Los Angeles as studios expand existing lots and independent capital firms create more soundstages.

In February, **Walt Disney Co.** said it would slash 7,000 jobs this year as the studio's streaming efforts continue to lose money.

Last year, **Netflix** cut 450 jobs and **Warner Bros. Discovery, NBCUniversal** and **Paramount Global** have announced layoffs in recent months.

Please see MEDIA page 43



Action: Shep Wainwright, mananging partner of East End Capital.

RINGO H.W. CHIU/LABJ

Redcar Digs Creative Space

REAL ESTATE: Firms 2nd fund commits $418 million.

By HANNAH MADANS WELK
Managing Editor

Despite high vacancy rates in the office market – the countywide vacancy rose from 14.4% the first quarter of 2019 to 24.1% the first quarter of this year, according to data from **Jones Lang LaSalle Inc.** – some developers are still betting big on creative office space.

Please see REAL ESTATE page 41

Some Firms Posit Growth

LEGAL: Eyeing 2024, hiring and expansion on the docket.

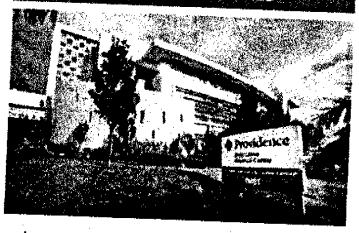
By ZANE HILL *Staff Reporter*

While the law firm hiring sprees that took place during the Covid-19 pandemic may have cooled off, some are looking to grow with 2024 in mind.

That means more hiring, and expansion into new markets.

Please see LEGAL page 6

SPECIAL REPORT HOSPITALS



In a year that was supposed to be a return to stability, many hospitals are in poor financial health, which can be in part attributed to inadequate reimbursements for services, labor costs and a large number of patients covered by government health programs.

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Activision Blizzard Deal Rejected in UK
Regulator rejected **Microsoft**'s bid to buy Santa Monica-based video game publisher. Page 4

Jamison Gets New Tenant
Zealot signs for 13,000 square feet at the Hollywood Entertainment Plaza, right. Page 11

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Media: Soundstages Primed for Starring Roles

Continued from page 1

Yet even as entertainment companies reduce their ranks, massive soundstage projects are under development and construction all over the city. With 6.2 million square feet of soundstages, Los Angeles is the world leader in terms of overall stage space.

Meanwhile, other markets are gaining ground. According to **FilmLA**, the United Kingdom, which had only 3.5 million square feet of dedicated stage space just three years ago, now comes in second to Los Angeles with 5.4 million square feet. Ontario, Canada, ranks third with 3.8 million square feet followed by Georgia with 3 million, New York with 2.8 million and British Columbia with 2.4 million.

"All of these competitive jurisdictions have plans to expand existing infrastructure," said a FilmLA report.

The report noted that year-over-year shoot activity was down almost 20% in the fourth quarter of last year and that the film and TV industry is "being impacted by corporate restructuring and impending union negotiations which have caused many productions to pause." The Writers Guild of America is now in contract negotiations with the Alliance of Motion Picture and Television Producers, and the Directors Guild of America and Screen Actors Guild will soon follow.

"The present slowdown in production notwithstanding, Los Angeles cannot afford to lose its competitive edge when it comes to soundstages and other production infrastructure," said FilmLA President **Paul Audley**.

Many existing studio lots are planning expansions. In March, the **Murdochs' Fox Corp.** announced a $1.5 billion upgrade of the iconic Fox Studio Lot in Century City, where plans call for nine new soundstages that will bring the total to 24 plus, in addition to high-rise office buildings. Burbank's historic Warner Bros. Ranch will be redeveloped by **Worthe Real Estate Group** in a $500 million overhaul that will include 16 new soundstages, a multi-level parking structure, support facilities and a 320,000-square-foot office building. NBCUniversal will be adding eight soundstages as part of an overall update of its century-old Universal Studios lot.

Rendering: East End Capital's Arts District project will include 16 soundstages.

Independent challengers

Hackman Capital Partners, which in 2018 purchased CBS Television City for $750 million, plans to invest $1.25 billion, tripling the lot's soundstages and adding 1.9 million square feet of studio, office and retail facilities. Hackman Capital also has designs for a $1 billion expansion of the Studio City-based Radford Studio Center, which encompassed 18 soundstages and 210,000 square feet of offices when the Culver City firm purchased the property from **ViacomCBS** in 2021.

Founded by **Mikel Elliott**, Quixote Studios, with sites in Pacoima and Sylmar, offered soundstages to productions by such clients as Disney, Warner Bros., HBO, Sony, Paramount and NBCUniversal. At the time of its sale to **Hudson Pacific Properties** last year for $360 million, it had 325 employees, over 500 cast trailers, trucks and specialized vehicles; one of the industry's largest inventories of grip and lighting and production equipment; and long-term lease rights to 23 soundstages in Los Angeles and three in New Orleans.

Outside of the Quixote Studios acquisition, Hudson Pacific, in partnership with **Blackstone**, has acquired Sunset Gower, Sunset Bronson and Sunset Las Palmas studios. It is also building Sunset Glenoaks in Sun Valley, which will see 240,000 square feet on over 10 acres with seven sound stages. The Sunset portfolio includes more than 60 stages across five lots in Los Angeles and the United Kingdom.

Downtown Los Angeles will also see some major studio build-out. New York-based real estate investment firm **Atlas Capital Group** is redeveloping the building that once housed the Los Angeles Times printing press into a movie and television production lot with 17 soundstages near the Arts District. Atlas bought the 26-acre printing facility for more than $240 million in 2019, and the firm now plans to spend $650 million creating the movie studio. The site will include more than 300,000 square feet of production workspace and 212,300 square feet of offices along with screening theaters, fitness center and a nine-story parking garage. The printing plant itself will be redeveloped into 11 soundstages, production support, executive offices, a full-service restaurant with an outdoor patio, a commissary, café and fitness center. The project will be built in two phases, with the first phase due to be complete next year.

Arts District activity

East End Studios is in the process of developing a production campus in the Arts District at 6th and Alameda streets. The complex will feature 16 soundstages covering 321,520 square feet of studio space as well as 292,310 square feet of creative office space and 106,570 square feet of production support on an approximately 15-acre lot. Vehicular parking will total 1,327 spaces at an underground site. International architecture firm **Grimshaw** has been hired to design the project.

East End's project is currently going through slight redesigns and entitlements, aiming to be under construction in the third quarter of next year and completed in 2026.

Shep Wainwright, managing partner of **East End Capital**, the developer behind East End Studios, said the downtown Los Angeles location at 6th and Alameda was a natural choice for a studio.

"We've always been bullish on the Arts District," Wainwright said. "We have a 5-acre site in Boyle Heights that we're about to go with vertical construction just across the L.A. River. You already have Apple in the Arts District, Spotify, Warner Music and a number of smaller studios and some other studios that are contemplated. We think for a number of reasons it divides the east and west side of L.A. It's got great access for trucking. It was historically an industrial neighborhood so it works really well for a studio."

East End's Boyle Heights site is a 240,000-square-foot project that will start construction in the next 30 to 45 days.

East End is also developing two sites in Glendale: a 97,000-square-foot project that is under construction on S. Glendale Avenue on a 2.5-acre site, which will accommodate either two or three soundstages.

There is also the 9-acre facility called Griffith on San Fernando Boulevard that will break ground by year's end and will see 10 soundstages rise.

With all of the soundstages East End is developing, Wainwright does not anticipate any problem filling them up with production.

"The demand in Los Angeles, everything has been running at about 95% occupancy," Wainwright said. "Anytime a new facility gets delivered, it gets gobbled up either by year-over-year tenants or long-term tenancy. We feel it's the epicenter of episodic television and we don't think that's going anywhere. There's still a ton of demand for it."

Peter Hajimihalis, who is based at **Jones Lang LaSalle**'s downtown Los Angeles office, leases soundstage space for entities such as Hackman Capital Partners and East End Capital.

"In terms of the existing studios that are looking at reinvesting and modernizing, you have years that these studios haven't had big capital investments made into the lot," Hajimihalis said. He added that aside from feature films and television series, the studios will generate revenue from other types of product, including commercials and gaming.

"You'll always have demand in L.A. because of the talent living here and the below-the-line employees," he said.

The building of studio lots with soundstages is a relatively new phenomenon.

"If you look historically in Los Angeles, purpose-built soundstages haven't been built over the last 15 or 20 years other than some recent expansions that are just finishing up now," Hajimihalis said.

Previously, productions had to film in makeshift soundstages.

Meanwhile, developers such as East End's Wainwright are enjoying the process of providing the industry with soundstages.

"I love development," Wainwright said. "I love taking something from nothing and turning it into something, regardless of what asset class it is. But (production studios are) an especially exciting one because there's a whole operational component to it that's very hands-on."

EAST END CAPITAL

EAST END CAPITAL

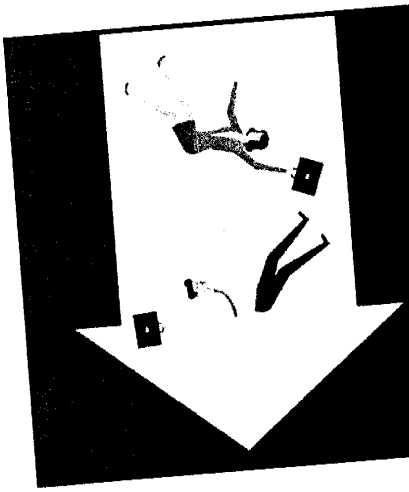
HEADQUARTERS: Glendale

YEAR FOUNDED: 2010

BUSINESS: Commercial real estate development

PARTNERS: Shep Wainwright, Jonathan Yormak, David Peretz

NOTABLE: East End purchased the warehouse properties for their East 6th Street and Alameda Street production campus last June for $240 million.



ECONOMIC DOLDRUMS

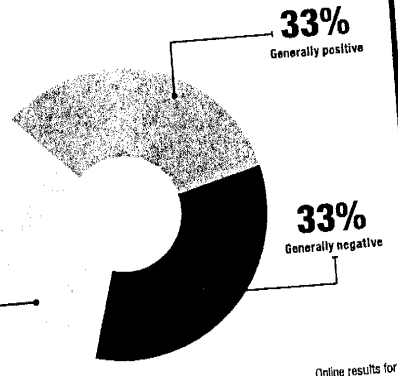
Americans have never been more downbeat about the economy, at least not in the 17 years that CNBC has been conducting its All-America Economic Survey. A record 69% hold negative views about the economy both now and in the future, according to the survey released April 18.

About two-thirds of Americans surveyed said their wages are falling behind inflation, and two-thirds said the nation is headed for recession. High interest rates are another concern.

Only 24% say now is a good time to invest in stocks, also the lowest reading in the survey's history.

LOS ANGELES BUSINESS JOURNAL POLL

What's your view of the overall economy now and in the future?



Online results for week ended Apr. 27.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

To the Santa Clarita Planning Commission,

I am writing to express my deep concerns regarding the proposed Shadowbox Studios project and its suitability for the chosen location. As a resident of this community, I believe it is important to consider the potential negative impact such a development could have on the surrounding area.

To illustrate my point, I want to draw your attention to the unfortunate situation experienced by the Santa Clarita Soccer Center. For decades, the center provided indoor soccer entertainment on Soledad Canyon Road, bringing joy and recreational opportunities to our community. However, as time passed, housing was constructed around the center, and soon enough, residents began to complain about the noise generated by the activities at the soccer center.

Despite operating well within its rights and having been an established part of the community for years, the soccer center was eventually forced to relocate. It was a classic case of "first in, first out" where the developer, knowing full well the nature of the surrounding community, gained approvals to build and sell homes. Then, when the new residents started to complain, the original land user, the soccer center, was unfairly pushed out.

This example serves as a cautionary tale of the consequences that can arise when incompatible land uses are not properly assessed and considered during the planning and approval process. It highlights the importance of preserving the integrity and character of existing businesses and activities that contribute to the unique fabric of our community.

I believe it would be deeply regrettable to repeat the same pattern with the proposed Shadowbox Studios project. We must take into account the potential impact it could have on the surrounding area and its existing residents. It is essential that we protect the rights and livelihoods of those who have long been part of our community, rather than allowing a new development to displace and gentrify them.

I implore you to carefully consider the appropriateness of the location for the Shadowbox Studios project. Let us learn from past mistakes and ensure that any future developments are compatible with the existing community and its needs. It is our shared responsibility to promote harmonious coexistence and protect the interests of all involved.

Thank you for your attention to this matter. I trust that you will take my concerns and the experiences of the Santa Clarita Soccer Center into consideration before blindly approving the proposed project.

Sincerely,

Name: Rachel Cook

Address: 24760 Oakcreek Ave, Newhall. CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

To the Santa Clarita Planning Commission,

My name is Roy, and I am writing to you as a concerned resident of Placerita Canyon. I'm the son of Lola, or as many of you know her, "the Egg Lady." I have my own business and help my mom on the property. I've grown up in this peaceful neighborhood, and I can't help but express my frustration and disbelief regarding the proposed Shadowbox project and its potential impact on our community.

So here's my question: Would any planning commissioner or the people in charge of this city want this enormous studio and essentially a freeway going through their own peaceful neighborhoods? It's easy to shove some fancy idea down someone's throat as long as it doesn't disrupt their own way of life. But what about us? What about the residents who have built their lives and homes here in Placerita Canyon?

Believe me, I've contemplated going to City Hall and raising holy hell, but I know it won't get us very far. I have a short temper, and I don't do well with stupid people who lack basic common sense. And let me tell you, it doesn't take a genius to figure out that this massive mess of a project just won't work. It's a giant catastrophe waiting to happen, and it will irreversibly change our neighborhood.

What baffles me the most is that decisions are being made by people who don't even live here. How can they possibly understand our community when no one is given more than 3-minutes to speak at a meeting? They should experience the consequences of their decisions firsthand. Let them have this mess in their own neighborhood and see how they like it.

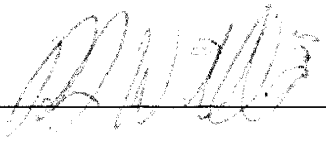
All I can say is that if we, the residents, don't get involved and stand together, they're going to ruin our neighborhood. We need to fight for what we believe in and protect the place we call home. Our voices matter, and it's time we make them heard.

I urge you, as planning commissioners and city officials, to consider the impact of this project on the lives of the people who have invested their time, effort, and love into Placerita Canyon. Think about the disruption it will cause, the loss of peace and livelihood, and the irreversible damage it will inflict on our community.

Please, listen to us, the ones who will have to live with the consequences of your decisions. We ask you to prioritize the well-being and safety of the residents over any short-sighted, profit-driven agenda. Let us preserve Placerita Canyon for future generations.

Thank you for taking the time to read my concerns. I hope you will seriously reconsider the impact of the Shadowbox project and stand with the residents of Placerita Canyon.

Sincerely,

Name: 

Address: 21640 Clendale ST. Newhall CA. 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the Dockweiler Drive extension. I have a question regarding the traffic plan if the construction for both the Dockweiler Drive extension and the studio campus were to be done concurrently. I would appreciate your response to the following question:

If the construction for the Dockweiler Drive extension and the studio campus were to occur simultaneously, what specific traffic plan or measures will be implemented to address the potential increase in construction-related traffic and ensure the smooth flow of vehicles in the area?

Thank you for your attention to this question. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the coordination of traffic management in the event that both the Dockweiler Drive extension and the studio construction are carried out concurrently.

Sincerely,

Name: Kyra Madsen

Address: 4069 Syracuse Ave Keton CA 93570

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the proposed Shadowbox Studios project and the potential scenario where construction for the Dockweiler Drive extension and the studio campus are done concurrently. I have concerns regarding the traffic plan in such a situation, and I would appreciate your response to the following questions:

If the construction for the Dockweiler Drive extension and the studio campus is done concurrently, what is the planned traffic management strategy to mitigate congestion and ensure the safe movement of vehicles in the area?

Has a comprehensive traffic plan been developed to address the potential challenges and impacts of simultaneous construction activities? What measures will be implemented to minimize disruptions to local traffic flow and surrounding neighborhoods?

Will there be specific construction-related traffic control measures, such as temporary traffic signals, detour signs, or flaggers, to ensure the smooth and orderly flow of vehicles during the construction phase?

How will the traffic plan account for the increased volume of construction vehicles, as well as the regular commuter and resident traffic, to minimize delays and potential safety hazards?

Are there designated construction vehicle routes or staging areas to prevent congestion on nearby roads and minimize conflicts with regular traffic patterns?

Will there be ongoing coordination and communication between the construction management team, local authorities, and traffic control agencies to address any unforeseen traffic issues and implement timely adjustments to the traffic plan?

Has there been consideration given to the potential impact on public transportation routes and services during concurrent construction activities? Will there be any alternative transportation options provided or adjustments made to accommodate public transit users?

How will the effectiveness of the traffic plan during concurrent construction be monitored and evaluated? Will there be mechanisms in place to address any issues that may arise and ensure continuous improvement throughout the construction process?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the proposed Shadowbox Studios project and the traffic plan if construction for the Dockweiler Drive extension and the studio campus is done concurrently.

Sincerely,

Name: Brandi Davis

Address: 26094 Ave of the Oaks
Santa Clarita, CA
91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the current status of the applicant's request to the California Public Utilities Commission (CPUC) regarding the designation of the 13th Street rail crossing as a quiet zone. I am interested in understanding the progress and outcome of this request, and would appreciate your response to the following questions:

Has the applicant submitted a formal request to the CPUC for the designation of the 13th Street rail crossing as a quiet zone? If so, when was the request submitted, and has it been acknowledged or reviewed by the CPUC?

What is the process and timeline for the CPUC's evaluation and decision-making regarding the quiet zone designation? Are there any specific criteria or requirements that need to be met in order to qualify for a quiet zone designation?

Has the CPUC conducted any inspections, studies, or assessments of the 13th Street rail crossing to evaluate its suitability for a quiet zone designation? If so, what were the findings of these evaluations, and how were they taken into consideration during the decision-making process?

Have there been any consultations or coordination between the applicant, the Santa Clarita Planning Commission, and the CPUC regarding the quiet zone request? If so, what has been the nature of these interactions, and what feedback or guidance has been provided by the CPUC?

What is the anticipated timeline for a decision by the CPUC regarding the quiet zone designation for the 13th Street rail crossing? Will there be a public announcement or notification once a decision is reached?

If the quiet zone designation is approved by the CPUC, what specific measures or modifications will be implemented at the 13th Street rail crossing to comply with the requirements and ensure a quieter and safer environment?

If the quiet zone designation is not approved, what alternative solutions or strategies are being considered to address any concerns related to noise and safety at the 13th Street rail crossing?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the status of the applicant's request to the CPUC for the designation of the 13th Street rail crossing as a quiet zone.

Sincerely,

Name: Angelica Mendoza

Address: 25118 Walnut St Newhall 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the current status of the applicant's request to the California Public Utilities Commission (CPUC) regarding the designation of the 13th Street rail crossing as a quiet zone. I would appreciate your response to the following question:

What is the current status of the applicant's request to the CPUC for the designation of the 13th Street rail crossing as a quiet zone? Has the request been submitted, and if so, what is the timeline for the CPUC's decision-making process? If granted, who assumes liability for accidents involving the crossing? What analysis will the City take to determine the risks involved with no train horn warnings?

Thank you for your attention to this question. I look forward to your clarification regarding the status of the applicant's request for the designation of the 13th Street rail crossing as a quiet zone.

Sincerely,

Name: Mary Michels

Address: 13000 Bracken St Arleta CA 91331

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express concerns about the lack of evacuation routes for residents of Placerita Canyon and the potential for a disaster similar to what occurred in Paradise, California during the devastating Camp Fire in 2018. Given the geographical characteristics of Placerita Canyon and the potential risks associated with wildfire or other emergencies, I kindly request your insights and clarification on the following matters:

Has there been a comprehensive assessment of the evacuation routes available to residents of Placerita Canyon in the event of a wildfire or other emergency? If so, what were the findings of this assessment, and what measures have been taken to address any identified limitations or challenges?

The back gate of the private road leading to Sierra Highway can only be accessed by residents who are privledged to pay for and receive a gate card. There is NO outbound egress without a gate card. Many canyon residents are on limited fixed incomes and cannot afford a gate pass. What considerations have the city, consultants, and commissioners made for this obvious limitation as a viable emergency evaculation route?

Considering the potential risks and vulnerabilities of Placerita Canyon, what specific emergency preparedness plans and strategies have been put in place to ensure the safety and evacuation of residents in the event of a disaster? Are there designated evacuation zones, emergency shelters, or communication systems established to facilitate an efficient and effective response?

Given the experiences and lessons learned from the Camp Fire in Paradise, California, has there been any proactive evaluation of the risks and potential hazards in Placerita Canyon to prevent a similar disaster? Have any measures, such as improved infrastructure, enhanced warning systems, or community education initiatives, been implemented to mitigate these risks and enhance the safety of residents?

Have the residents of Placerita Canyon been actively involved in the discussions and planning processes related to emergency preparedness and evacuation routes? Has their input and feedback been considered in the development of strategies and solutions to address these concerns?

What coordination and collaboration have taken place between the City of Santa Clarita, emergency response agencies, and other relevant stakeholders to ensure effective emergency management and evacuation plans for Placerita Canyon? Are there ongoing partnerships or initiatives in place to continually assess and improve the preparedness and response capabilities in the area?

Are there any plans or proposals to establish additional evacuation routes or alternative means of egress for residents of Placerita Canyon? If not, what are the main factors or challenges that prevent the implementation of such routes, and what steps are being taken to address these concerns?

In the event that immediate evacuation is not possible, what measures are in place to ensure the safety and well-being of residents, including the protection of livestock, pets, and other valuable assets? Are there established protocols for sheltering in place or providing temporary accommodations until evacuation can be safely conducted?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the evacuation routes for residents of Placerita Canyon and the measures in place to ensure their safety during emergencies. Understanding the efforts and considerations related to emergency preparedness will help address the concerns of the community and ensure the overall well-being of the residents.

Sincerely,

Name: James Reick

Address: 2610 Barcotta Dr Saugus CA 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concerns regarding the deficiencies in the Draft Environmental Impact Report (EIR) for the Shadowbox Studios project and the need for a comprehensive Land Use and Planning study. Specifically, I would like to address the following issues:

Voting District Map: It has come to my attention that Placerita Canyon residents have been designated in a minority district in the proposed voting district map currently before the City Council. Given their minority status, it is crucial to conduct a study to evaluate the potential impacts of the Shadowbox Studios project on these residents in terms of land use and planning. Will the planning commission acknowledge the need for such a study and ensure that it is conducted to address the concerns of the affected residents?

Disregard for Land Use and Planning in the Draft EIR: The Draft EIR for the Shadowbox Studios project failed to adequately consider land use and planning aspects, despite listing farm equipment as an example of an incompatible land use. It is evident that the roads surrounding Placerita Canyon are shared by various modes of transportation, including tractors, horses, golf carts, pedestrians, and other types of livestock. In light of this, I urge the planning commission to recognize the deficiencies in the Draft EIR and allow city staff and consultants the necessary time and resources to conduct a thorough Land Use and Planning study.

Evaluating Compatibility and Impacts: A comprehensive Land Use and Planning study would be instrumental in assessing the compatibility of the Shadowbox Studios project with the existing land use patterns and the potential impacts on the surrounding areas. This study should take into account the shared use of roads, potential conflicts, safety concerns, and the well-being of the community members, residents, and stakeholders. Will the planning commission prioritize the completion of a thorough study to address these critical aspects of the project?

Ensuring Compliance with Environmental Regulations: Conducting a Land Use and Planning study would not only fulfill the requirements of environmental regulations but also ensure that all necessary analyses and assessments are conducted to adequately evaluate the project's impacts. By addressing the deficiencies in the Draft EIR and allowing for a comprehensive study, the planning commission can demonstrate its commitment to upholding environmental regulations and making informed decisions.

I kindly request that the planning commission carefully consider these concerns and take appropriate action to rectify the deficiencies in the Draft EIR. By conducting a comprehensive Land Use and Planning study, you would ensure that the impacts of the Shadowbox Studios project are thoroughly evaluated and that the concerns of the affected residents and stakeholders are properly addressed.

Thank you for your attention to these matters. I trust that you will give due consideration to the need for a Land Use and Planning study and take the necessary steps to ensure a thorough evaluation of the Shadowbox Studios project.

Sincerely,

Name: [signature]

Address: 14734 Arroyo Sylmar Calif

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the current status of the applicant's request to the California Public Utilities Commission (CPUC) regarding the designation of the 13th Street rail crossing as a quiet zone, as well as the safety risks associated with vehicles, pedestrians, cyclists, and other road users. I would appreciate your response to the following questions:

What is the current status of the applicant's request to the CPUC for the designation of the 13th Street rail crossing as a quiet zone? Has the request been submitted, and if so, what is the timeline for the CPUC's decision-making process?

Have safety concerns related to vehicles, pedestrians, cyclists, and other road users been addressed in the applicant's request for the quiet zone designation? How were these safety risks identified and what measures have been proposed to mitigate them?

What potential safety benefits are anticipated with the designation of the 13th Street rail crossing as a quiet zone? How will the designated quiet zone enhance safety for vehicles, pedestrians, cyclists, and other road users in the vicinity of the rail crossing?

Were there any safety studies or assessments conducted to evaluate the current risks associated with the 13th Street rail crossing? If so, what were the findings and how do they inform the request for a quiet zone designation?

In the absence of a designated quiet zone, what safety measures are currently in place to mitigate the risks to vehicles, pedestrians, cyclists, and other road users at the 13th Street rail crossing?

Will there be ongoing monitoring and evaluation of safety conditions and risks at the 13th Street rail crossing, regardless of the outcome of the quiet zone designation request? How will any identified safety concerns be addressed and mitigated?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the status of the applicant's request for the designation of the 13th Street rail crossing as a quiet zone, and the safety considerations associated with vehicles, pedestrians, cyclists, and other road users.

Sincerely,

Name: Ruben M. Zamora

Address: 27645 Sycamore Creek Dr Valencia, CA.

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire further about the considerations and conditions of approval regarding the limitation of hours and days of operation for the proposed Shadowbox Studios project. Understanding the importance of balancing the needs of the studio with the well-being of the surrounding community, I would appreciate your insights and response to the following questions:

What specific factors were taken into consideration when determining the limitations on the hours and days of operation for the Shadowbox Studios project? Were there any studies or assessments conducted to evaluate the potential impacts on noise levels, traffic, or other aspects that could affect the quality of life for nearby residents?

How were the concerns and feedback of the local community and neighboring businesses taken into account during the decision-making process regarding the limitations on operating hours and days? Were there any public hearings or opportunities for public input where residents could voice their concerns and preferences?

Will the limitations on operating hours and days be consistent throughout the year, or are there provisions for potential variations during certain periods or specific circumstances? For example, will there be different restrictions during weekends, holidays, or times when there are special events or productions taking place?

Are there mechanisms in place to monitor and enforce compliance with the limitations on operating hours and days? What measures will be taken to address any instances of non-compliance or violations?

Has there been any consideration given to potential adjustments or amendments to the limitations on operating hours and days in the future, based on feedback from the community, changes in circumstances, or other relevant factors? Will there be an opportunity for periodic review and assessment to ensure that the limitations remain appropriate and effective?

What measures will be implemented to communicate and ensure awareness of the operating hour limitations to the studio personnel, visitors, and the general public? Will there be clear signage, notifications, or other means of providing information about the designated operating hours and days?

How will the impacts of the limitations on operating hours and days be evaluated and assessed over time? Will there be a process in place to gather feedback from the community and evaluate the effectiveness of the imposed restrictions in mitigating any potential adverse effects?

Thank you for your attention to these questions. I understand the importance of establishing appropriate limitations on operating hours and days for the Shadowbox Studios project, and I appreciate your thorough insights and clarification regarding the considerations and conditions of approval in this regard.

Sincerely,

Name: REBECCA ZAMORA

Address: 27645 SYCAMORE CREEK DR
VALENCIA CA 91354

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the considerations and conditions of approval regarding the limitation of hours and days of operation for the proposed Shadowbox Studios project. Given the potential impact on the surrounding community, I would appreciate your insights and response to the following questions, which seek to explore the reasoning and implications of such limitations:

What specific factors were taken into consideration when determining the limitations on the hours and days of operation for the Shadowbox Studios project? Were considerations such as noise levels, traffic impact, and compatibility with the surrounding residential areas taken into account?

Has there been any consultation or engagement with the community, residents, and local businesses to gather feedback and input regarding the desired limitations on the operating hours and days of the studio facilities? If so, what were the main concerns or preferences expressed by the community, and how were they incorporated into the conditions of approval?

Will there be a clear and enforceable schedule or set of guidelines outlining the permitted hours and days of operation for the Shadowbox Studios project? How will compliance with these limitations be monitored and enforced to ensure that the agreed-upon conditions are met?

Has there been any consideration given to the potential need for flexibility in the limitations on operating hours and days? For instance, are there provisions in place to accommodate special events, time-sensitive productions, or other circumstances that may warrant deviation from the standard operating schedule?

How will the limitations on hours and days of operation be communicated to the public, particularly to the surrounding community? Will there be efforts to provide clear and easily accessible information to ensure that residents and stakeholders are aware of the agreed-upon schedule and any changes or updates that may occur?

What mechanisms or procedures will be in place to address any concerns or complaints from the community regarding non-compliance with the limitations on operating hours and days? How will these issues be resolved and any necessary adjustments made to ensure that the operations of the studio facilities are in line with the approved conditions?

Thank you for your attention to these questions. I understand the importance of striking a balance between the needs of the Shadowbox Studios project and the well-being of the surrounding community, and I appreciate your insights and clarification regarding the considerations and conditions of approval for limiting the hours and days of operation.

Sincerely,

Name: Josh Zamora

Address: 25330 Nolte Ct
Canyon Country CA 91387

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire further about the considerations and conditions of approval regarding the limitation of hours and days of operation for the proposed Shadowbox Studios project. Recognizing the significance of this aspect in fostering harmonious coexistence between the studio and the surrounding community of Placerita Canyon, I would appreciate your comprehensive response to the following questions:

In determining the limitations on the hours and days of operation, what specific methodologies or studies were utilized to assess the potential impact on noise levels and traffic patterns in the vicinity of the Shadowbox Studios project? Were there any noise and traffic impact assessments conducted to inform the decision-making process?

How were the concerns of the community regarding potential disruptions and inconveniences taken into account when establishing the limitations? Were there any public hearings, consultations, or surveys held to gather input from residents, local businesses, and other stakeholders regarding their preferences and expectations for the operating schedule?

Will the limitations on operating hours and days be subject to periodic review and potential revision based on the actual impact observed during the initial phases of the Shadowbox Studios project? How will the planning commission assess the effectiveness of the established limitations and consider adjustments if necessary?

Are there any specific criteria or guidelines that were considered when determining the appropriate hours and days of operation? For instance, were peak traffic hours, school schedules, or other relevant factors taken into consideration to minimize potential conflicts and ensure the least possible disruption to the surrounding community?

How will the enforcement of the limitations on operating hours and days be managed? Will there be designated personnel responsible for monitoring compliance, and what measures will be in place to address any violations or non-compliance by the studio operators?

Has there been consideration given to any potential exceptions or allowances for special circumstances, such as major film productions, events of significant public interest, or collaborative initiatives with local organizations? How will such exceptions be evaluated and approved to strike a balance between accommodating unique opportunities and maintaining the integrity of the agreed-upon limitations?

What communication strategies will be implemented to ensure effective dissemination of information regarding the limitations on operating hours and days? Will the studio operators be required to inform their staff, clients, and visitors about these restrictions to foster awareness and adherence?

Thank you for your attention to these additional questions. I believe that a thorough understanding of the considerations and conditions surrounding the limitation of hours and days of operation is crucial in promoting a mutually beneficial relationship between the Shadowbox Studios project and the surrounding community.

Sincerely,

Name: Susan M Zamora

Address: 27645 Sycamore Creek Dr
Valencia CA 91354

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire further about the considerations and conditions of approval regarding the limitation of hours and days of operation for the proposed Shadowbox Studios project. It is essential to thoroughly understand the implications and potential impacts of these limitations on both the studio operations and the surrounding community. I kindly request your insights and response to the following questions:

How were the specific limitations on the hours and days of operation determined? Were there any studies or assessments conducted to evaluate the potential noise, traffic, or other impacts associated with the studio's activities during different times of the day or week?

Has there been any analysis or evaluation of similar studio projects or establishments in the area to assess the effectiveness and feasibility of the proposed limitations? Were there any lessons learned or best practices identified during this process?

Are the limitations on operating hours and days intended to be permanent, or will they be subject to periodic review and potential adjustment based on monitoring and feedback from the community and relevant stakeholders? If there are provisions for review, what will be the criteria and process for evaluating the need for any changes to the limitations?

Have the limitations on hours and days of operation been designed to strike a balance between the needs of the studio project and the quality of life for nearby residents? Were there any compromises or adjustments made during the planning process to address concerns and ensure a harmonious coexistence between the studio operations and the community?

Will there be any measures or conditions in place to address potential exemptions or special circumstances that may arise, such as for productions with unique scheduling requirements or events of significant cultural or economic importance? How will the determination of such exemptions be made, and will there be mechanisms for community input or notification regarding these exceptions?

Has there been consideration given to the potential economic impacts and benefits of the limitations on hours and days of operation? Specifically, how will the conditions strike a balance between fostering the growth and success of the studio project and ensuring the well-being and interests of the surrounding businesses and local economy?

How will the enforcement of the limitations on operating hours and days be handled? Will there be a designated authority responsible for monitoring compliance and addressing any violations, and what will be the consequences for non-compliance?

Has there been any analysis or discussion regarding the potential future adjustments to the limitations on hours and days of operation, considering the anticipated growth and development of the studio project over time? Will there be provisions for reevaluating and potentially revising the limitations to accommodate the evolving needs and circumstances of the studio and the community?

Thank you for your attention to these additional questions. I greatly appreciate your insights and clarification regarding the considerations and conditions of approval for limiting the hours and days of operation for the Shadowbox Studios project. Understanding the thoroughness of the planning and decision-making process will help to ensure a well-balanced and mutually beneficial relationship between the studio and the surrounding community.

Sincerely,

Name: GRACE REICK

Address: 22618 Barcelona DR SAUGUS CA 91350

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the possible inclusion of a morality clause as a condition of approval for the Shadowbox Studios project, specifically regarding the prohibition of the production of pornography within the studio facilities. I would appreciate your response to the following question:

Will there be a morality clause included as a condition of approval for the Shadowbox Studios project that explicitly prohibits the production of pornography within the studio facilities?

Thank you for your attention to this question. I look forward to your clarification regarding the presence or absence of a morality clause related to the production of pornography within the Shadowbox Studios facilities.

Sincerely,

Name: [signature]

Address: 26111 Ulbeale St Newhall, Ca 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential future of the Shadowbox Studios project in light of industry considerations regarding geographical desirability and the availability of new studio inventory in Los Angeles. Given the fickleness of the entertainment industry, I would appreciate your response to the following questions:

How has the geographical desirability of Santa Clarita (or lack thereof), particularly in relation to the entertainment industry, been taken into account during the planning process for the Shadowbox Studios project? Were any market assessments or industry studies conducted to evaluate the demand for studio space in the area?

In light of the construction of new studio inventory throughout Los Angeles, what measures or strategies are in place to attract tenants and ensure the utilization of the sound stages within the Shadowbox Studios project?

Has there been any analysis or contingency planning conducted regarding the potential scenario where some or most of the sound stages within the Shadowbox Studios project are not rented? What steps will be taken to mitigate any adverse effects or address the challenges associated with underutilization?

Are there any alternative uses or strategies that have been considered for the studio facilities in the event of low occupancy or unrented sound stages? For example, are there plans to diversify the use of the space to accommodate other types of production or creative endeavors?

What collaborations or partnerships, if any, are being pursued to attract and support the demand for studio space in Santa Clarita? Are there initiatives to foster connections with industry professionals, production companies, or content creators to promote the utilization of the Shadowbox Studios facilities?

Will there be regular assessments or evaluations conducted to monitor the demand and occupancy of the sound stages within the Shadowbox Studios project? How will any identified challenges or opportunities be addressed to ensure the long-term viability and success of the studio facilities?

Has there been any consideration given to potential incentives or support programs to attract tenants and encourage the utilization of the Shadowbox Studios facilities, especially in a competitive market environment?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the future of the Shadowbox Studios project in relation to industry considerations and the potential demand for studio space in Santa Clarita.

Sincerely,

Name: STEVE BACON

Address: 24740 MEADVIEW AVE NEWHALL, CA. 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential future scenario of the Shadowbox Studios project in the event that some or most of the sound stages remain unrented, considering the perception among industry insiders that Santa Clarita is an area of last resort in terms of geographical desirability. I would appreciate your insights and response to the following questions:

Has there been a market analysis conducted to assess the demand for studio space in the Santa Clarita area, taking into account the competition from new studio inventory being constructed throughout Los Angeles?

What measures or strategies are in place to attract tenants and ensure the occupancy of the sound stages within the Shadowbox Studios project? Have any agreements or partnerships been established with production companies, studios, or industry stakeholders to promote the utilization of the studio facilities?

If some or most of the sound stages within the Shadowbox Studios project remain unrented, what contingency plans or alternative uses are envisioned for the vacant spaces? Has there been consideration given to repurposing the unused areas to serve other creative or commercial purposes?

How does the planning commission address the concerns raised by industry insiders regarding Santa Clarita being perceived as an area of last resort in terms of geographical desirability? Are there any initiatives or plans in place to enhance the appeal and competitiveness of the Santa Clarita area as a filming destination?

Are there any incentives or support programs available to attract production companies and encourage them to choose the Shadowbox Studios facilities over other options in Los Angeles?

Has the potential impact of unrented sound stages on the local economy and job market been assessed? What steps will be taken to minimize any negative consequences and maximize the economic benefits associated with the operation of the Shadowbox Studios project?

Will there be regular monitoring and evaluation of the occupancy rates and overall success of the Shadowbox Studios project? How will any identified challenges or issues be addressed and mitigated to ensure the long-term viability of the studio facilities?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential future scenario of the Shadowbox Studios project in light of industry perceptions and the competition from new studio inventory in Los Angeles.

Sincerely,

Name: _____

Address: 26111 Aldaba St Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the presence of a morality clause as a condition of approval for the Shadowbox Studios project, specifically addressing the prohibition of pornography production within the studio facilities. Given the sensitive nature of the subject, I would appreciate your response to the following questions, which seek to explore the considerations and rationale behind the decision:

Has the issue of prohibiting pornography production within the Shadowbox Studios facilities been discussed and considered during the planning process? If so, what were the factors and considerations taken into account when making a decision regarding the inclusion or exclusion of a morality clause?

What legal and ethical considerations were evaluated in determining whether to include a morality clause as a condition of approval? Were any local, state, or federal laws taken into account in relation to the production and distribution of pornography?

What are the potential social, cultural, and community impacts that were considered when discussing the inclusion or exclusion of a morality clause? Were there any concerns raised by community members, advocacy groups, or other stakeholders regarding the potential production of pornography within the studio facilities?

If a morality clause prohibiting pornography production is included as a condition of approval, what specific measures will be in place to enforce and monitor compliance with this clause? How will violations be addressed and resolved?

Were there any discussions about the constitutionality or potential legal challenges associated with including a morality clause that restricts certain forms of content production within the studio facilities?

In the absence of a morality clause, what other measures, if any, will be implemented to ensure responsible content production and compliance with relevant laws and regulations within the Shadowbox Studios facilities?

Have there been any precedents or examples from other similar studio projects or jurisdictions that were considered when making a decision regarding the inclusion or exclusion of a morality clause?

Thank you for your attention to these questions. I understand the sensitive nature of this topic and appreciate your thorough insights and clarification regarding the presence or absence of a morality clause addressing pornography production within the Shadowbox Studios project.

Sincerely,

Name: Jonah Michels

Address: 13000 Bracken St Arleta Ca 91331

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to seek clarification regarding the absence of a study on incompatible land use in the Draft Environmental Impact Report (EIR) for the proposed Shadowbox Studios project. I have noticed that in the CEQA documents, farm equipment is listed as an example of incompatible land use. Given the shared use of roads surrounding Placerita Canyon by various modes of transportation, including tractors, horses, golf carts, pedestrians, and other types of livestock, I would appreciate answers on the following matters:

Why was there no specific study conducted to assess the potential compatibility issues between the proposed Shadowbox Studios project and the existing land uses in the surrounding area, particularly in relation to the shared roadways?

Considering the presence of tractors, horses, golf carts, pedestrians, and other types of livestock in the vicinity of Placerita Canyon, what factors were taken into consideration in determining the compatibility of the proposed studio project with these existing land uses?

Placerita Canyon has been carved into the proposed voting district maps as a minority district. Yet, did not receive consistent consideration as a minority population for land use study in the Draft EIR. Is seems a flaw in the study conducted. Is there a way commissioners can require land use planning to be studied prior to final approval?

Has there been any analysis or assessment of the potential impacts on safety, traffic flow, and overall compatibility due to the interaction between studio-related vehicles and the diverse mix of transportation modes and livestock in the area?

Are there any specific mitigation measures or design considerations being proposed to address the potential conflicts and ensure the safe coexistence of the proposed Shadowbox Studios project with the existing land uses and shared roadways?

How will the proposed project address concerns related to the potential disruption of the current peaceful and rural character of the area, considering the presence of non-motorized transportation modes and livestock in the vicinity?

Has there been any community input or feedback regarding the potential compatibility issues between the Shadowbox Studios project and the existing land uses in the area? Have the concerns raised by residents, businesses, or other stakeholders influenced the planning commission's considerations on this matter?

Are there any plans for ongoing monitoring and evaluation of the compatibility between the proposed studio project and the existing land uses? Will there be mechanisms in place to address any unforeseen issues, adapt to changing circumstances, and ensure ongoing compatibility?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the absence of a study on incompatible land use in the Draft EIR for the Shadowbox Studios project. Understanding the considerations and measures taken to address potential compatibility issues will provide valuable information for assessing the project's impact on the surrounding area and its ability to coexist harmoniously with existing land uses.

I look forward to your response.

Sincerely,

Name: S Kolver

Address: 21146 Avenida De Sonrisa Saugus 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about the potential scenarios and considerations surrounding the Shadowbox Studios project in the event that some or most of the sound stages are not rented upon completion. Given the evolving dynamics of the entertainment industry and the construction of new studio inventory throughout Los Angeles, I would appreciate your response to the following questions:

Has there been an assessment of the market demand for sound stages in the Santa Clarita area, taking into account the construction of new studio facilities in Los Angeles? What factors were considered in determining the feasibility and potential occupancy of the sound stages within the Shadowbox Studios project?

Are there any contingency plans in place in the event that some or most of the sound stages remain unrented after the completion of the Shadowbox Studios project? How will the project adapt to such a situation?

Has there been an analysis of the potential economic impact on the studio and the surrounding area if the sound stages are not rented as expected? What measures will be taken to mitigate any negative effects on the local economy?

Are there any plans or strategies in place to attract potential tenants and promote the utilization of the sound stages within the Shadowbox Studios project? How will the project actively market itself to the entertainment industry and showcase its unique features or advantages?

Has there been consideration given to diversifying the potential use of the sound stages beyond traditional film and television production, such as accommodating virtual reality or augmented reality experiences, live performances, or other innovative content creation?

What steps will be taken to actively engage with production companies, content creators, and industry professionals to understand their needs and tailor the offerings of the Shadowbox Studios project to align with their requirements and preferences?

Will there be flexibility in terms of leasing agreements, rates, or other incentives to attract tenants and promote the utilization of the sound stages within the Shadowbox Studios project?

Are there any plans to collaborate with local and regional film commissions, industry associations, or organizations to foster partnerships and enhance the visibility and attractiveness of the Shadowbox Studios project?

Thank you for your attention to these questions. I look forward to your insights and clarification regarding the potential scenarios and considerations related to the occupancy of sound stages within the Shadowbox Studios project.

Sincerely,

Name: Todd KOLVER

Address: 21146 Avenida De Sonrisa Saugus 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about how the planning commission plans to address deficiencies and the issue of incompatibility between the proposed studio project and the Placerita Canyon Special Standards District as well as the current zoning regulations. I would appreciate your insights and response to the following questions:

What specific provisions or regulations within the Placerita Canyon Special Standards District and current zoning are considered compatible with the proposed studio project? How does the planning commission plan to address what is not compatible during the evaluation and approval process?

Has there been any consideration given to potential amendments or modifications to the Placerita Canyon Special Standards District or zoning regulations to accommodate the studio project? If so, what would be the process and criteria for making such changes, and how would they be reconciled with the established planning guidelines and objectives?

In cases where incompatibilities cannot be readily resolved, what alternatives or options might be explored to mitigate the conflicts between the proposed studio project and the Placerita Canyon Special Standards District or current zoning? Are there any provisions for variances, conditional use permits, or other mechanisms that could potentially allow for a balanced and mutually beneficial outcome?

What role does public input and community engagement play in addressing the incompatibilities between the studio project and the Placerita Canyon Special Standards District or current zoning? How would the concerns and perspectives of residents and stakeholders be taken into account during the decision-making process? A three-minute speaking opportunity during a public meeting is insufficient.

Are there any precedents or examples of similar cases where incompatibilities between development projects and established planning regulations were successfully resolved? What lessons or insights could be drawn from those experiences to guide the planning commission's approach in addressing the current situation?

Considering the importance of maintaining the integrity of the Placerita Canyon Special Standards District and existing zoning regulations, what measures will be taken to ensure that any modifications or exceptions granted for the studio project do not set a precedent that could undermine the established planning framework or create inconsistencies in future development decisions?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding how the planning commission plans to address the incompatibility between the proposed studio project and the Placerita Canyon Special Standards District as well as the current zoning regulations.

Sincerely,

Name: A Adams

Address: 21516 Placerita Cyn Rd Newhall CA 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to inquire about how the planning commission intends to address the issue of incompatibility between the proposed studio project and the Placerita Canyon Special Standards District and current zoning regulations. I would appreciate your insights and response to the following questions:

What specific provisions of the Placerita Canyon Special Standards District and current zoning regulations will need to be changed for the proposed studio project to be approved? How do the existing regulations and protections differ from the requirements and guidelines set forth by the studio project?

Has there been any assessment or evaluation conducted to determine the extent of the incompatibility between the proposed studio project and the Placerita Canyon Special Standards District? What factors were considered in identifying the areas of non-compliance or incompatibility?

Considering the incompatibility between the project and the Special Standards District and zoning regulations, what steps or measures will the planning commission take to address this issue? Are there any provisions or conditions of approval that will be imposed to ensure compliance with the Placerita Canyon Special Standards District and current zoning requirements?

Will any modifications or variances be granted to accommodate the studio project within the Placerita Canyon Special Standards District and current zoning regulations? If so, what criteria or justifications will be used to determine the suitability and acceptability of such modifications or variances?

How will the planning commission balance the need for economic development and job creation that the studio project may bring with the preservation of the Placerita Canyon Special Standards District and adherence to current zoning regulations? What considerations will be given to protect the integrity and character of the surrounding area while accommodating the proposed development? Will the studio be required to make a cash donation to the Placerita Canyon Property Owners Association to further preservation of the canyon as a condition of approval?

Has there been any engagement or consultation with residents, local businesses, or other stakeholders in the Placerita Canyon area to gather their feedback and concerns regarding the compatibility of the studio project with the Special Standards District and current zoning regulations? If so, how has this feedback influenced the planning commission's considerations and decision-making process?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding how the planning commission intends to address the incompatibility of the studio project with the Placerita Canyon Special Standards District and current zoning regulations.

Sincerely,

Name: C Lamas

Address: 21213 Placerita Cyn Rd Newhall Ca 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my concerns regarding the deficiencies in the Draft Environmental Impact Report for the Shadowbox Studios project, particularly in relation to the land use and planning aspects. It has come to my attention that the proposed voting district map designates Placerita Canyon residents in a minority district, which should have triggered a study considering their minority status. Additionally, the EIR acknowledges farm equipment as an example of an incompatible land use, which also should have prompted further analysis. I respectfully request your attention and consideration to the following points:

Acknowledging the minority status of Placerita Canyon residents in the proposed voting district map, why was a study on land use and planning not conducted in the Draft EIR? Given that minority status often raises unique concerns and considerations, it is important to properly evaluate the impacts of the project on these communities and their land use patterns.

What criteria or guidelines were used to determine that a study on land use and planning was not necessary for the Shadowbox Studios project? Were these criteria consistent with the requirements of the California Environmental Quality Act (CEQA) or other applicable regulations?

Has there been any assessment or analysis conducted to evaluate the potential impacts and compatibility of the project with the existing land use and planning in Placerita Canyon? If not, what steps will be taken to ensure that a thorough evaluation is conducted, considering the shared use of roads by tractors, horses, golf carts, pedestrians, and other types of livestock?

Will the planning commission acknowledge the deficiencies in the Draft EIR and provide city staff and consultants with the necessary resources and time to conduct a proper Land Use and Planning study? It is crucial to address any shortcomings in the environmental documents to ensure a comprehensive evaluation of the project's impacts and compatibility with the surrounding land use patterns.

How will the planning commission ensure that all necessary studies and analyses, including a Land Use and Planning study, are conducted to adequately assess the impacts of the Shadowbox Studios project on Placerita Canyon and its residents? Will there be opportunities for community input and engagement during this process?

Will there be provisions or conditions imposed on the project to mitigate any potential adverse impacts on the land use and planning of Placerita Canyon? Are there plans to incorporate measures that promote the safe coexistence of different modes of transportation and address the concerns raised by the shared use of roads by various types of vehicles, pedestrians, and livestock?

What actions will be taken to address the deficiencies in the Draft EIR and ensure compliance with relevant environmental regulations? Will there be an opportunity to update and supplement the EIR to include the necessary studies and analyses related to land use and planning?

I appreciate your attention to these matters and your commitment to a thorough evaluation of the Shadowbox Studios project. Considering the concerns raised by the minority status of Placerita Canyon residents and the potential impacts on land use and planning, it is essential to conduct comprehensive studies and engage in meaningful dialogue with the community. I trust that the planning commission will give due consideration to these concerns and take appropriate actions to address the deficiencies in the Draft EIR

Sincerely,

Name: Yadira Zamora

Address: 25015 Nadwell Ave Newhall Ca

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the feasibility of establishing a secondary entrance from Circle J for the north parking lot of the proposed Shadowbox Studios project, and to also explore the potential of incorporating the flyover bridge at the Via Princessa intersection. These measures have been suggested as potential solutions to alleviate traffic congestion at the Arch and 13th intersection.

Has there been any thorough evaluation of the feasibility and potential benefits of establishing a secondary entrance from Circle J for the north parking lot of the Shadowbox Studios project? If not, could the planning commission undertake a comprehensive analysis of this option, considering its potential to alleviate traffic congestion and improve accessibility to the studio campus?

In addition to a secondary entrance from Circle J, has there been any consideration given to constructing a flyover bridge at the Via Princessa intersection? Such a bridge could provide an alternative route for vehicles, bypassing the Arch and 13th intersection altogether. Could the planning commission explore the feasibility and potential benefits of this infrastructure improvement as a means to further alleviate traffic congestion in the area?

If a flyover bridge at the Via Princessa intersection were to be considered, what are the main technical, engineering, and environmental factors that need to be assessed? Are there any potential challenges or constraints that would need to be addressed, such as land availability, impact on surrounding properties, or compliance with regulatory requirements?

Have any traffic impact studies or assessments been conducted to evaluate the potential effects of both a secondary entrance from Circle J and a flyover bridge at the Via Princessa intersection? If so, what were the findings of these studies, and how were they taken into account during the planning process?

Considering the potential benefits of both a secondary entrance from Circle J and a flyover bridge at the Via Princessa intersection, what level of coordination and collaboration would be required between the City of Santa Clarita, the planning commission, and other relevant stakeholders to successfully implement these infrastructure improvements?

How would the inclusion of a secondary entrance from Circle J and a flyover bridge at the Via Princessa intersection align with the broader transportation and infrastructure plans for the Santa Clarita area? Are there existing proposals or initiatives that these improvements could complement or support?

Are there any alternative solutions or approaches that have been explored to address traffic congestion at the Arch and 13th intersection? If so, what were these alternatives, and why were they not deemed suitable for the project?

Thank you for your attention to these questions. I greatly appreciate your insights and clarification regarding the feasibility of a secondary entrance from Circle J, the potential for a flyover bridge at the Via Princessa intersection, and any other potential solutions to alleviate traffic congestion. Understanding the considerations and potential improvements related to traffic flow and accessibility will contribute to a comprehensive and informed decision-making process.

Sincerely,

Name: Yolanda Ojeda

Address: 25735 Hogan Valencia CA 91355

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to further inquire about the potential requirements for the studio project regarding preservation within the Placerita Canyon area. Specifically, I would like to know if the studio will be required to make a cash donation to the Placerita Canyon Property Owners Association (PCPOA) as a condition of approval, aimed at furthering preservation efforts within the canyon. I would appreciate your insights and response to the following question:

Has there been any consideration given to requiring the studio project to make a cash donation to the Placerita Canyon Property Owners Association (PCPOA) as a condition of approval, with the aim of supporting and enhancing preservation initiatives within the canyon? If so, what factors will be taken into account when determining the amount of the donation, and how will the funds be allocated?

Thank you for your attention to this question. I greatly appreciate your insights and clarification regarding the potential requirements for the studio project and its contribution to the preservation efforts within the Placerita Canyon area.

Sincerely,

Name: [redacted]

Address: 24655 Golden oak Lane
~~Newhall~~
Newhall, CA
91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

Dear Santa Clarita Planning Commission,

I am writing to express my deep concerns regarding the potential negative impact of the proposed Shadowbox Studios project on the evacuation routes for residents of Placerita Canyon. With the addition of approximately 3,000 vehicles and trucks associated with the studio, there is a significant risk of congestion and increased difficulty for residents to evacuate during emergencies.

Has there been a thorough assessment of the potential impact of the additional 3,000 vehicles and trucks from the Shadowbox Studios project on the existing evacuation routes for residents of Placerita Canyon? If so, what were the findings of this assessment, and how have they been taken into consideration during the planning process?

What measures are being taken to ensure that the increased traffic from the studio project does not exacerbate congestion on the evacuation routes during emergencies? Are there plans to expand or improve the capacity of the evacuation routes to accommodate both residents and the additional vehicles associated with the studio project?

Are there any alternative routes or contingency plans being considered to alleviate the potential strain on the existing evacuation routes due to the additional vehicles from the Shadowbox Studios project? If not, what considerations are being given to address this significant concern and ensure the safety of residents in the event of an emergency?

Has there been any coordination or collaboration with emergency response agencies to address the potential challenges faced by residents during evacuations, considering the increased traffic from the studio project? Are there joint efforts to develop strategies and protocols that prioritize the safety and well-being of residents while ensuring efficient traffic management during emergencies?

Are there any requirements or conditions being imposed on the Shadowbox Studios project to mitigate the impact on the evacuation routes and ensure the safety of residents? For example, are there limitations on the timing of studio operations during peak evacuation hours or requirements for the studio to provide additional support or resources for emergency preparedness and response?

How will the effectiveness of the measures taken to address the impact on evacuation routes be monitored and evaluated? Will there be mechanisms in place to make adjustments or modifications if unforeseen issues arise or if it is determined that additional measures are necessary to ensure the safe evacuation of residents?

Have residents of Placerita Canyon been consulted or involved in the decision-making process regarding the potential impact on evacuation routes? If so, what feedback or concerns have been expressed by residents, and how have these influenced the planning commission's considerations?

Thank you for your attention to these additional concerns. I greatly appreciate your insights and clarification regarding the potential negative impact of the Shadowbox Studios project on the evacuation routes for residents of Placerita Canyon. Understanding the measures being taken to address these concerns and prioritize the safety of residents is crucial for the overall well-being of the community.

Sincerely,

Name: Sharon Secor

Address: 21224 Placerita Cyn Rd, Newhall 91321

MASTER CASE NO: 21-109
Shadowbox Studios Project
Re: Comments to the DEIR

To the Santa Clarita Planning Commission,

I am writing to you today as a long-time resident of Placerita Canyon. My name is Lola, but most people around here know me as "the Egg Lady." I've spent my life first connected to the entertainment industry, then caring for horses, and now I tend my chickens. I don't own a computer or a cell phone so I'm relying upon the kindness of a neighbor to help type this letter. Having lived in this beautiful canyon since 1961, I have witnessed the changes and challenges that have come our way over the years. Today, I am deeply concerned about the proposed Shadowbox project and its potential impact on our community.

First, I cannot help but wonder why the Shadowbox project needs to be so big. The size and scale of the project seem overwhelming, and I worry about the consequences it may bring. Placerita Canyon has always been a place of natural beauty, and I fear that such a massive development will irreversibly change the character of our community. Our canyon has always been a peaceful and close-knit community, and I am afraid that this massive development will disrupt the very essence of what makes Placerita Canyon who we are and what we represent.

One particular concern that keeps me awake at night is the impact of the Dockweiler Drive extension. I firmly believe that it will "kill us" as the increased traffic will undoubtedly congest our already narrow roads. Even if Shadowbox builds 20 lanes, stop still means stop, and no one moves. Our canyon is prone to wildfires and flooding, and the thought of being trapped in an evacuation situation with the proposed traffic patterns sends shivers down my spine. The increased congestion will not only cause gridlock and inconvenience but more importantly put our safety at risk. It's a recipe for disaster.

Living in Placerita Canyon, we are no strangers to the threats of wildfires and flooding. These natural disasters can strike without warning, and we rely on our existing evacuation routes to ensure our safety. The Shadowbox project, with its thousands of additional vehicles and trucks, utilizing the same evacuation routes as residents, is another recipe for disaster. I fear that in times of emergency, our already limited evacuation options will become completely overwhelmed, leaving us vulnerable, trapped and doomed.

While I understand the need for development and progress, I do not believe that the Shadowbox project is the best solution for our community. In fact, I find it absolutely crazy for the city to even consider approving such a massive development in our canyon. It seems as though the decision-makers must be out of their minds, overlooking the concerns and well-being of the residents who have called this place home for decades.

I ask you to carefully consider the long-term implications of the Shadowbox project on our community. Please listen to the voices of the residents who have dedicated their lives to preserving the rural and equestrian Placerita Canyon. Please prioritize the safety and well-being of our community over the glamour of a movie studio facility. Even now there's nothing going on in the studios around us. Melody Ranch doesn't look to have any active projects. Disney Ranch was put on indefinate hold. What happens if Shadowbox sits empty?

Thank you for taking the time to read and answer my concerns. I trust that you will approach this decision with wisdom, empathy, and a deep understanding of the impact it will have on Placerita Canyon and its residents.

Sincerely,

Name: Lola Williams

Address: 21645 Clearedale St. Newhall CA. 91321

ATTACHMENT 2

SHADOWBOX
TRIP GENERATION TOTALS

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Shadowbox Trip Generation Totals

	TOTAL VEHICLES (a)			AUTOMOBILES				TRUCKS (b)			
	In	Out	TOTAL	In	Out	TOTAL	Percentage	In	Out	TOTAL	Percentage
ADT	3646	3647	7293	3555	3556	7111	97.5%	91	91	182	2.5%
AM Peak Hour	387	218	605	363	198	561	92.7%	24	20	44	7.3%
PM Peak Hour	297	387	684	283	363	646	94.4%	14	24	38	5.6%

(a) SOURCE TABLE 6 on Page 34 of the Shadowbox Transportation Asessment

(b) SOURCE Figure 2B of the March 23 2023 Memo re Gate 3 Redesign by Gibson Transpsortation Consulting.

Split of Trucks by Size for Studio Campuses

Heavy Trucks (WB-40 to WB-60)	15%
Light Trucks (10-ton)	55%
Light Trucks	30%

SOURCE MBS Studio Operations, April 2023

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ATTACHMENT 3

EMFAC Emission Rates for South Coast AQMD Calendar Year 2024

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Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on

Region	Calendar Ye	Vehicle Cat	Model Yea	Speed	Fuel	Population	% Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNE	NOx_IDLEX
South Coas	2024	HHDT	Aggregate	Aggregate	Gasoline	66.31370332	0.09945195	4424.268575	4424.268575	0	1326.804576	6.679631	0
South Coas	2024	HHDT	Aggregate	Aggregate	Diesel	101734.5563	0.85155065	13368763.56	13368763.56	0	1602081.023	1.749347	68.05319
South Coas	2024	HHDT	Aggregate	Aggregate	Electricity	317.0170561	0.0026522	33942.7512	0	33942.75	4479.081892	0	0
South Coas	2024	HHDT	Aggregate	Aggregate	Natural Gas	10386.38327	0.04634521	671307.5473	671307.5473	0	67209.29798	0.887052	8.951917
South Coas	2024	MHDT	Aggregate	Aggregate	Gasoline	25495.89397		1374427.63	1374427.63	0	510121.8466	0.378523	0.089443
South Coas	2024	MHDT	Aggregate	Aggregate	Diesel	117140.1358		5002001.319	5002001.319	0	1440533.693	0.925858	12.46805
South Coas	2024	MHDT	Aggregate	Aggregate	Electricity	364.6794161		20014.07303	0	20014.07	4910.208527	0	0
South Coas	2024	MHDT	Aggregate	Aggregate	Natural Gas	1525.759373		73112.00855	73112.00855	0	13553.35007	0.107291	6.666503
South Coas	2024	LHDT1	Aggregate	Aggregate	Gasoline	205772.0104	0.6042939	8100729.199	8100729.199	0	3065696.355	0.157818	0.036022
South Coas	2024	LHDT1	Aggregate	Aggregate	Diesel	107344.0588	0.39317043	4521712.5	4521712.5	0	1350253.221	1.314713	1.878474
South Coas	2024	LHDT1	Aggregate	Aggregate	Electricity	793.2713258	0.00253567	59781.81668	0	59781.82	11081.49806	0	0
South Coas	2024	LHDT2	Aggregate	Aggregate	Gasoline	32210.08702		1194341.963	1194341.963	0	479882.3035	0.153182	0.036279
South Coas	2024	LHDT2	Aggregate	Aggregate	Diesel	47493.71803		1985332.842	1985332.842	0	597411.2258	1.095862	1.848791
South Coas	2024	LHDT2	Aggregate	Aggregate	Electricity	205.3234255		14660.61657	0	14660.62	2717.86022	0	0
South Coas	2024	MDV	Aggregate	Aggregate	Gasoline	1622853.742	0.96919006	62814787.61	62814787.61	0	7507624.065	0.116239	0
South Coas	2024	MDV	Aggregate	Aggregate	Diesel	20419.82579	0.01219499	810698.8942	810698.8942	0	95859.45728	0.110498	0
South Coas	2024	MDV	Aggregate	Aggregate	Electricity	18088.23249	0.01080254	661368.513	0	661368.5	92522.9903	0	0
South Coas	2024	MDV	Aggregate	Aggregate	Plug-in Hybrid	13081.43284	0.00781241	602962.1886	287085.7012	315876.5	54091.72481	0.003161	0

Heavy Duty	diesel	85.16%	HHDT, MHDT
Medium Duty	diesel	39.32%	LHDT
Light Duty	diesel	1.22%	MDV

Split of Trucks by Size for Studio Campuses

		Total Trucks	% Diesel	# Trucks
Heavy Trucks (WB-40 to WB-60)	15%	27.3	85.16%	24
Light Trucks (10-ton)	55%	100.1	39.32%	40
Light Trucks	30%	54.6	1.22%	1
				65

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ATTACHMENT 4

UPDATED CALIFORNIA NATURAL DIVERSITY DATABASE QUERY RESULTS

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UPDATED CALIFORNIA NATURAL DIVERSITY DATABASE QUERY

SciName	ComName	Taxon Group	Elm Code	Total Occs	FedList	CalList	GRank	SRank	RPlant Rank	OthrStatus	Habitats	GenHab	MicroHab	Return Occs
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	118	None	None	G5	S4		CDFW_WL-Watch List | IUCN_LC-Least Concern	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	2
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	ABPBX91091	235	None	None	G5T3	S3		CDFW_WL-Watch List	Chaparral | Coastal scrub	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	5
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	None	None	G5	S3		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Valley & foothill grassland	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	1
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	Endangered	None	G2G3	S2		CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered	Desert wash | Riparian scrub | Riparian woodland | South coast flowing waters | South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	2
Anniella spp.	California legless lizard	Reptiles	ARACC01070	127	None	None	G3G4	S3S4		CDFW_SSC-Species of Special Concern		Contra Costa County south to San Diego, within a variety of open habitats.This element represents California records of Anniella not yet assigned to new species within the Anniella pulchra complex.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	21
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	None	None	G4	S3		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	1
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	None	None	G5T2	S2		CDFW_SSC-Species of Special Concern		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	7
Artemisiospiza belli belli	Bell's sparrow	Birds	ABPBX97021	61	None	None	G5T2T3	S3		CDFW_WL-Watch List	Chaparral | Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	4
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	148	None	None	G5T5	S3		CDFW_SSC-Species of Special Concern		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	14
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	None	None	G4	S3		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	6

UPDATED CALIFORNIA NATURAL DIVERSITY DATABASE QUERY

SciName	ComName	Taxon Group	Elm Code	Total Occs	FedList	CalList	GRank	SRank	RPlant Rank	OthrStatus	Habitats	GenHab	MicroHab	Return Occs
Berberis nevinii	Nevin's barberry	Dicots	PDBER060A0	32	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub | Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	4
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	None	Candidate Endangered	G2	S2		IUCN_EN-Endangered		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	10
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	796	Threatened	None	G3	S3		IUCN_VU-Vulnerable	Valley & foothill grassland | Vernal pool | Wetland	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	2
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2561	None	Threatened	G5	S4		BLM_S-Sensitive | IUCN_LC-Least Concern	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	3
California Walnut Woodland	California Walnut Woodland	Woodland	CTT71210CA	76	None	None	G2	S2.1			Cismontane woodland			16
Calochortus clavatus var. gracilis	slender mariposa-lily	Monocots	PMLIL0D096	143	None	None	G4T2T3	S2S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	92
Calochortus fimbriatus	late-flowered mariposa-lily	Monocots	PMLIL0D1J2	93	None	None	G3	S3	1B.3	SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	Chaparral | Cismontane woodland | Riparian woodland | Ultramafic	Chaparral, cismontane woodland, riparian woodland.	Dry, open coastal woodland, chaparral; on serpentine. 270-1645 m.	3
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	Monocots	PMLIL0D122	111	None	None	G3T2	S2	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	Chaparral | Lower montane coniferous forest | Meadow & seep	Meadows and seeps, chaparral, lower montane coniferous forest.	Vernally moist places in yellow-pine forest, chaparral. 195-2530 m.	1
Calochortus plummerae	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	None	None	G4	S4	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	18
Calystegia peirsonii	Peirson's morning-glory	Dicots	PDCON040A0	26	None	None	G4	S4	4.2		Chaparral | Chenopod scrub | Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Valley & foothill grassland	Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	Often in disturbed areas or along roadsides or in grassy, open areas. 30-1500 m.	13
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	28	Threatened	None	G1	S1		AFS_TH-Threatened | IUCN_EN-Endangered	Aquatic | South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	3
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Dicots	PDPGN040J1	21	None	Endangered	G2T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Coastal scrub | Valley & foothill grassland	Coastal scrub, valley and foothill grassland.	Sandy soils. 15-1015 m.	15

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Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	PDPGN040J2	150	None	None	G3T2	S2	1B.1	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	2
Cismontane Alkali Marsh	Cismontane Alkali Marsh	Marsh	CTT52310CA	4	None	None	G1	S1.1			Marsh & swamp | Wetland			1
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	Threatened	Endangered	G5T2T3	S1		BLM_S-Sensitive | USFS_S-Sensitive	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	2
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	None	None	G4	S2		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	2
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	391	Candidate	None	G4T1T2Q	S2		IUCN_EN-Endangered | USFS_S-Sensitive	Closed-cone coniferous forest	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	1
Deinandra minthornii	Santa Susana tarplant	Dicots	PDAST4R0J0	35	None	Rare	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Coastal scrub	Chaparral, coastal scrub.	On sandstone outcrops and crevices, in shrubland. 280-705 m.	11
Dodecahema leptoceras	slender-horned spineflower	Dicots	PDPGN0V010	42	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	3
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	184	None	None	G5	S3S4		BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	1
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1424	None	None	G3G4	S3		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	12

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Eremophila alpestris actia	California horned lark	Birds	ABPAT02011	94	None	None	G5T4Q	S4		CDFW_WL-Watch List | IUCN_LC-Least Concern	Marine intertidal & splash zone communities | Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	1
Euderma maculatum	spotted bat	Mammals	AMACC07010	68	None	None	G4	S3		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern		Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests.	Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	1
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	None	None	G4G5T4	S3S4		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	4
Euphydryas editha quino	quino checkerspot butterfly	Insects	IILEPK405L	186	Endangered	None	G5T1T2	S1S2			Chaparral | Coastal scrub	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	1
Falco mexicanus	prairie falcon	Birds	ABNKD06090	451	None	None	G5	S4		CDFW_WL-Watch List | IUCN_LC-Least Concern	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	1
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	Fish	AFCPA03011	16	Endangered	Endangered	G5T1	S1		AFS_EN-Endangered | CDFW_FP-Fully Protected	Aquatic | South coast flowing waters	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	Cool (<24 C), clear water with abundant vegetation.	8
Gila orcuttii	arroyo chub	Fish	AFCJB13120	49	None	None	G2	S2		AFS_VU-Vulnerable | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | South coast flowing waters	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	4
Gymnogyps californianus	California condor	Birds	ABNKA03010	13	Endangered	Endangered	G1	S2		CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_CR-Critically Endangered	Chaparral | Valley & foothill grassland	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude.	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	1
Harpagonella palmeri	Palmer's grapplinghook	Dicots	PDBOR0H010	57	None	None	G4	S3	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 m.	1
Helianthus inexpectatus	Newhall sunflower	Dicots	PDAST4N250	1	None	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Marsh & swamp | Meadow & seep | Wetland	Marshes and swamps, riparian woodland.	Freshwater marshes, and seeps. 305 m.	1

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Helminthoglypta fontiphila	Soledad shoulderband	Mollusks	IMGASC2250	12	None	None	G1	S1				All-breathing terrestrial snail. Known from type locality, Little Rock Creek Cyn on north side of San Gabriels; west to Santa Clarita in Soledad Cyn; east to the vicinity of Big Rock Creek; and north to Elizabeth Lake Cyn in the Sierra Pelona Mtns.	Frequently found in riparian habitat (springs, seeps, along streams). May be found in rock piles, flood-borne debris, or under dead yuccas where other cover is not available.	1
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	Mollusks	IMGASC2472	2	None	None	G1G2T1	S1				All-breathing terrestrial snail. Known from type locality, Pacoima Canyon on the west side of the San Gabriel Mountains. Additional specimens from Elizabeth Lake Canyon in the Sierra Pelona Mountains may merit review.	Found mostly under bark and fragments of rotten logs.	2
Helminthoglypta uvasana	Grapevine shoulderband	Mollusks	IMGASC2650	2	None	None	G1	S1				All-breathing terrestrial snail. Known from type locality along Grapevine Creek in Castaic Valley, in the vicinity of Fort Tejon. Additional historical specimen from about 21 mi SSE of type locality, Oak Flat Ranger Station.	Found under downed oak logs in leaf litter, in brush, and in woodrat nests; among valley oak, nettle and poison oak in valley oak woodland grading to chaparral.	1
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	103	None	None	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	1
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	101	None	None	G5	S3		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	1
Lanius ludovicianus	loggerhead shrike	Birds	ABPBR01030	110	None	None	G4	S4		CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Broadleaved upland forest | Desert wash | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	5
Lasiurus cinereus	hoary bat	Mammals	AMACC05032	238	None	None	G3G4	S4		IUCN_LC-Least Concern	Broadleaved upland forest | Cismontane woodland | Lower montane coniferous forest | North coast coniferous forest	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	1
Lepechinia rossii	Ross' pitcher sage	Dicots	PDLAM0V060	3	None	None	G1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral	Chaparral.	Soil derived from fine-grained, reddish sedimentary rock. 670-915 m.	2

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Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	PDBRA1M114	142	None	None	G5T3	S3	4.3		Chaparral | Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	1
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	AMAEB03051	103	None	None	G5T3T4	S3S4			Coastal scrub	Intermediate canopy stages of shrub habitats and open shrub / herbaceous and tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	2
Lupinus paynei	Payne's bush lupine	Dicots	PDFAB2B580	7	None	None	G1Q	S1	1B.1		Coastal scrub | Riparian scrub | Valley & foothill grassland	Coastal scrub, riparian scrub, valley and foothill grassland.	Sandy. 220-425 m.	4
Macrotus californicus	California leaf-nosed bat	Mammals	AMACB01010	46	None	None	G3G4	S3		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian scrub | Sonoran desert scrub	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats.	Needs rocky, rugged terrain with mines or caves for roosting.	1
Mainland Cherry Forest	Mainland Cherry Forest	Forest	CTT81820CA	3	None	None	G1	S1.1			Broadleaved upland forest			3
Malacothamnus davidsonii	Davidson's bush-mallow	Dicots	PDMAL0Q040	78	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland	Coastal scrub, riparian woodland, chaparral, cismontane woodland.	Sandy washes. 150-1525 m.	17
Navarretia fossalis	spreading navarretia	Dicots	PDPLM0C080	82	Threatened	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Alkali playa | Chenopod scrub | Marsh & swamp | Vernal pool | Wetland	Vernal pools, chenopod scrub, marshes and swamps, playas.	San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrouded by other habitat types. 15-850 m.	3
Navarretia ojaiensis	Ojai navarretia	Dicots	PDPLM0C130	22	None	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Openings in shrublands or grasslands. 275-620 m.	5
Navarretia setiloba	Piute Mountains navarretia	Dicots	PDPLM0C0S0	56	None	None	G2	S2	1B.1	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Cismontane woodland | Pinon & juniper woodlands | Valley & foothill grassland	Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland.	Red clay soils, or on gravelly loam. 180-1645 m.	3
Neotamias speciosus speciosus	lodgepole chipmunk	Mammals	AMAFB02172	24	None	None	G4T3T4	S2			Chaparral | Upper montane coniferous forest	Summits of isolated Piute, San Bernardino, and San Jacinto mountains. Usually found in open-canopy forests.	Habitat is usually lodgepole pine forests in the San Bernardino Mts and chinquapin slopes in the San Jacinto Mts.	1
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	132	None	None	G5T3T4	S3S4		CDFW_SSC-Species of Special Concern	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	5
Onychomys torridus ramona	southern grasshopper mouse	Mammals	AMAFF06022	28	None	None	G5T3	S3		CDFW_SSC-Species of Special Concern	Chenopod scrub	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	1
Opuntia basilaris var. brachyclada	short-joint beavertail	Dicots	PDCAC0D053	199	None	None	G5T3	S3	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	19

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Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	39	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Vernal pool | Wetland	Vernal pools.	10-660 m.	3
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	784	None	None	G4	S4		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	19
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	1087	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Species of Special Concern	Coastal bluff scrub | Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	27
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	PDAST440C0	62	None	None	G4	S2	2B.2		Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland	Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	6
Rana boylii pop. 6	foothill yellow-legged frog - south coast DPS	Amphibians	AAABH01056	79	Proposed Endar	Endangered	G3T1	S1		BLM_S-Sensitive | USFS_S-Sensitive	Aquatic | Riparian forest | Riparian scrub | Riparian woodland | South coast flowing waters	Southern Coast Ranges from Monterey Bay south through San Gabriel Mountains; west of the Salinas River in Monterey Co, south through Transverse Ranges, and east through San Gabriel Mountains. Historically may have ranged to Baja California.	Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	2
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1685	Threatened	None	G2G3	S2S3		CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	2
Rana muscosa	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	Endangered	Endangered	G1	S1		CDFW_WL-Watch List | IUCN_EN-Endangered | USFS_S-Sensitive	Aquatic	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes.	Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	1

UPDATED CALIFORNIA NATURAL DIVERSITY DATABASE QUERY

SciName	ComName	Taxon Group	Elm Code	Total Occs	FedList	CalList	GRank	SRank	RPlant Rank	OthrStatus	Habitats	GenHab	MicroHab	Return Occs
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	AFCJB3705K	13	None	None	G5T1	S1		AFS_TH-Threatened | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Aquatic | South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	1
Riparia riparia	bank swallow	Birds	ABPAU08010	299	None	Threatened	G5	S3		BLM_S-Sensitive | IUCN_LC-Least Concern	Riparian scrub | Riparian woodland	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	1
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	CTT32720CA	30	None	None	G1	S1.1			Coastal scrub			4
Senecio aphanactis	chaparral ragwort	Dicots	PDAST8H060	98	None	None	G3	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	1
Setophaga petechia	yellow warbler	Birds	ABPBX03010	78	None	None	G5	S3S4		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	1
Southern California Threespine Stickleback Stream	Southern California Threespine Stickleback Stream	Inland Waters	CARE2320CA	5	None	None	GNR	SNR						2
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	CTT61310CA	246	None	None	G4	S4			Riparian forest			55
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	CTT61330CA	111	None	None	G3	S3.2			Riparian forest			19
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest	Riparian	CTT61340CA	14	None	None	G2	S2.1			Riparian forest			3
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	CTT63300CA	56	None	None	G3	S3.2			Riparian scrub			18
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	CTT62400CA	230	None	None	G4	S4			Riparian woodland			16
Southern Willow Scrub	Southern Willow Scrub	Riparian	CTT63320CA	45	None	None	G3	S2.1			Riparian scrub			9
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1428	None	None	G2G3	S3S4		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	49
Streptanthus campestris	southern jewelflower	Dicots	PDBRA2G0B0	73	None	None	G3	S3	1B.3	BLM_S-Sensitive | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Chaparral | Lower montane coniferous forest | Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Open, rocky areas. 605-2590 m.	1

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SciName	ComName	Taxon Group	Elm Code	Total Occs	FedList	CalList	GRank	SRank	RPlant Rank	OthrStatus	Habitats	GenHab	MicroHab	Return Occs
Symphyotrichum greatae	Greata's aster	Dicots	PDASTE80U0	56	None	None	G2	S2	1B.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest | Chaparral | Cismontane woodland | Lower montane coniferous forest | Riparian woodland	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons. 335-2015 m.	3
Taricha torosa	Coast Range newt	Amphibians	AAAAF02032	88	None	None	G4	S4		CDFW_SSC-Species of Special Concern		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow moving streams.	2
Taxidea taxus	American badger	Mammals	AMAJF04010	594	None	None	G5	S3		CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Alkali marsh | Alkali playa | Alpine | Alpine dwarf scrub | Bog & fen | Brackish marsh | Broadleaved upland forest | Chaparral | Chenopod scrub | Cismontane woodland | Closed-cone coniferous forest | Coastal bluff scrub | Coastal dunes | Coastal prairie | Coastal scrub | Desert dunes | Desert wash | Freshwater marsh | Great Basin grassland | Great Basin scrub | Interior dunes | Ione formation | Joshua tree woodland | Limestone | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Mojavean desert scrub | Montane dwarf scrub | North coast coniferous forest | Oldgrowth | Pavement plain | Redwood | Riparian forest | Riparian scrub | Riparian woodland | Salt marsh | Sonoran desert scrub | Sonoran thorn woodland | Ultramafic | Upper montane coniferous forest | Upper Sonoran scrub | Valley & foothill grassland	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	1
Thamnophis hammondii	two-striped gartersnake	Reptiles	ARADB36160	184	None	None	G4	S3S4		BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Marsh & swamp | Riparian scrub | Riparian woodland | Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	7
Valley Oak Woodland	Valley Oak Woodland	Woodland	CTT71130CA	91	None	None	G3	S2.1			Cismontane woodland			8
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	505	Endangered	Endangered	G5T2	S3			Riparian forest | Riparian scrub | Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	12