APPENDIX D
BIOLOGICAL RESOURCES REPORTS

Shadowbox Studios Project

Biological Resources Assessment

prepared for

Shadowbox Studios
1415 Constitution Road SE
Atlanta, Georgia 30316
Contact: Jeff Weber

prepared by

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

February 2023

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

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1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Biological Resources Assessment (BRA) Report for Shadowbox Studios to document existing conditions and provide a basis for evaluation of potential impacts to special-status and sensitive biological resources during development associated with the Shadowbox Studios Project (project) in the City of Santa Clarita (City), Los Angeles County, California (Figure 1).

1.1 Project Location

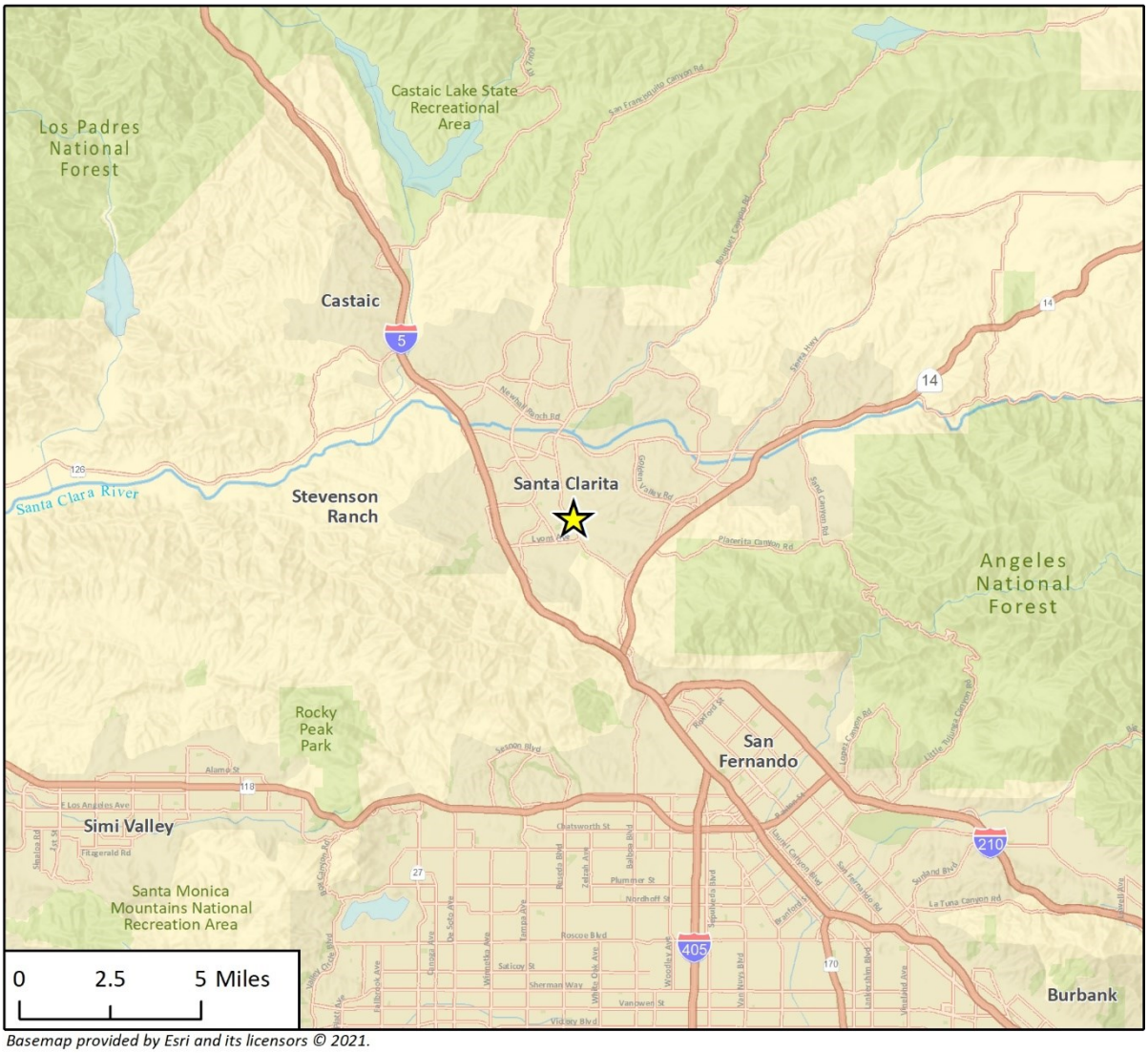
The project is located on an approximately 93.5-acre site in an urbanized area in the southern portion of the City (Figure 2). The approximate center of the project site is at latitude 34.388431 °N and longitude 118.531656 °W. The Public Land Survey depicts the project site in Township 4 North, Range 17 West (San Bernardino baseline and meridian) within the *Newhall, California* 7.5-minute topographic quadrangle (USGS 2018). Railroad Avenue runs parallel to the western boundary of the project site and 12th Street is adjacent to the southern boundary. Placerita Creek bisects the northern portion of the project site.

Adjacent land uses include residential developments to the north and east, and commercial and light industrial uses to the south and west. Undeveloped land is also adjacent to the northeast of the project site. Land uses in the greater vicinity include residential, commercial, and light industrial, as well as oilfields located approximately one mile to the east. The Newhall Metrolink right-of-way is located along the project site's western boundary, parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east.

1.2 Project Description

The Shadowbox Studios – Santa Clarita is a state-of-the-art, full-service film and television studio campus that is planned for the currently-vacant 93.5-acre parcel of land situated at the northeast corner of Railroad Avenue and 13th Street. The campus overall building total area is approximately 1,294,500 square feet in multiple use types. A five-level (four elevated) parking structure is also included in the proposed project. A detailed statistical summary of buildings and uses is included on the Project Site Plans, included with this application. The overall site includes 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 other specialty services. The project proposes a bridge across Placerita Creek to access a graded employee parking area on the north side of Placerita Creek. The EIR also evaluates the adjacent 11.4 acre Metropolitan Water District (MWD) right of way parcel, which may potentially be utilized for excess parking, subject to agreement with MWD.

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2021.

Project Location

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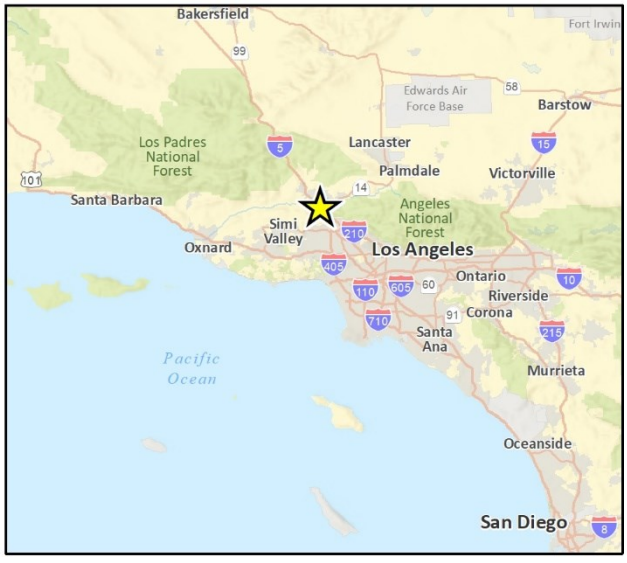

Figure 2 Project Location

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Fig 2 Project Location_Proj Design_20220222

2 Methodology

2.1 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special-status plant and animal species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by Federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, City of Santa Clarita).

2.1.1 Definition of Special-Status Species

For the purposes of this report, special-status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); species that are under review may be included if there is a reasonable expectation of listing within the life of the project
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife (CDFW)
- Species designated as locally important by the City of Santa Clarita and/or otherwise protected through ordinance or local policy.

2.1.2 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes and are further discussed in Appendix A:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- Porter-Cologne Water Quality Control Act
- City of Santa Clarita General Plan
- City of Santa Clarita Municipal Code

2.2 Literature Review

Queries of the USFWS Information, Planning and Conservation System (IPAC) (USFWS 2022a), CDFW California Natural Diversity Database (CNDDB) (CDFW 2022), and the California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2022a)

were conducted to obtain comprehensive information regarding State and federally listed species as well as other special-status species considered to have potential to occur with 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*). The results of these scientific database queries were compiled into a table that is presented in Appendix D.

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 (USGS 2018)
- US Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA, NRCS 2022a)
- USFWS Critical Habitat Portal (USFWS 2022b)
- USFWS National Wetland Inventory (NWI) (USFWS 2022c)
- United States Geological Survey (USGS) National Hydrography Dataset (NHD) (USGS 2022)

2.3 Field Reconnaissance Survey

A field reconnaissance survey was conducted to document the existing conditions and to evaluate the potential for presence of sensitive biological resources in the project site including special-status plant and wildlife species, sensitive plant communities, potential jurisdictional waters of the U.S./State and wetlands, and habitat for federally and State protected nesting birds.

The field reconnaissance survey was conducted by Rincon biologists Sarah Toback and Katherine Christensen on January 20, 2022. Weather conditions during the survey included clear skies with temperatures ranging from 52 degrees Fahrenheit (°F) to 70°F and winds ranging from 5 to 15 miles per hour. The project site was surveyed on foot, where accessible, and surveyed via binoculars in areas that were inaccessible. All biological resources encountered on-site were recorded.

Representative photographs of the project site were taken (Appendix B), and an inventory of all plant and wildlife species observed was compiled (Appendix C). Natural and semi-natural vegetation community classification was based using *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), which establishes systematic classifications and definitions of vegetation communities. Updates to the MCV2 provided in the online database (CNPS 2022b) were taken into account. Each vegetation mapping unit was analyzed for characteristics to define the applicable vegetation community, such as dominant or co-dominant plant species and community membership rules. Additionally, land covers were characterized in areas that appeared to be altered by anthropogenic activities and were dominated by non-native or ornamental vegetation (e.g., disturbed).

2.4 Focused Surveys

2.4.1 Jurisdictional Delineation

Information in the report related to jurisdictional waters is based on a formal jurisdictional delineation conducted by Rincon on June 10, 2021 (Appendix E, Rincon 2021a). The delineation mapped and recorded the extent of potential waters of the U.S., CDFW-jurisdictional streambeds, and/or waters of the State. Current federal and State policies, methods, and guidelines were used to

identify and delineate potential jurisdictional areas. Data collection in the project site was focused in areas containing a potential waterway and sample points were chosen as best representation of the conditions within the project site.

2.4.2 Rare Plant Surveys

Information on rare plants is based on previously prepared botanical survey reports from 2015, 2020, 2021, and 2022 (Rincon 2015, 2020, 2021b, and 2022a; Appendix F). The rare plant surveys were conducted on April 3, May 7, and June 30, 2015; March 24 and May 22, 2020; May 5 and 28, 2021; and April 29 and May 24, 2022. The surveys were floristic in nature and generally followed the *CNPS Botanical Survey Guidelines* (CNPS 2001) and the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). All plant species observed within the 93.5-acre project site were recorded (Appendix C). Field surveys were scheduled to optimize detection of any rare plant species with potential to occur within the project site based on the known blooming periods of rare plant species that have been previously documented in the region (Appendix D).

The survey was conducted using systematic field techniques by walking meandering transects through the entire project site. Special attention was given to areas with a high potential to support rare plant species (e.g., vegetation community interfaces, areas with unique soils).

2.4.3 Burrowing Owl Surveys

Information related to western burrowing owl (*Athene cunicularia*) is based on the findings of a focused species habitat assessment, focused burrow survey, and focused owl surveys conducted by Rincon on April 7, 28, May 19, and June 10, 2022 (Rincon 2022b). The surveys were conducted according to guidelines outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). The habitat assessment, focused burrow survey, and focused breeding season owl surveys were performed by systematically searching for potential foraging and nesting habitat within the project site plus a 150-meter buffer. The project site was assessed on foot by 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.

2.4.4 Coastal California Gnatcatcher Surveys

Information related to coastal California gnatcatcher (*Polioptila californica californica*; CAGN) is based on the results of focused breeding season CAGN surveys conducted by Rincon on April 15, 22, 29, May 6, 13, and 20, 2022 (Rincon 2022b). Breeding season surveys were conducted pursuant to Section IV of the USFWS *Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol*, issued February 28, 1997, and revised July 28, 1997 (USFWS 1997). The focused CAGN surveys were conducted within a 100-foot buffer of the project site during the breeding season (March 15 – June 30).

3 Existing Conditions

This section summarizes the existing conditions of the project site and results of biological resource field database inquiries and field surveys. Brief discussions regarding the general physical characteristics within the project site, the watershed and drainages, soils, vegetation and land cover types and general wildlife species, are presented below. Representative photographs of the project site are provided in Appendix B, and complete list of all plants and wildlife species observed within the project site are presented in Appendix C.

3.1 Physical Characteristics

The project site is situated in a region that is characterized by a Mediterranean climate with warm, dry summers and cool, wet winters. Average high temperatures range from 77 to 89 degrees Fahrenheit (°F) and average low temperatures range from 61 to 68 °F. The average annual precipitation in the region is 15.56 inches with the majority falling in February (Western Regional Climate Center 2022).

The topography of the project site is generally level, with the exception of a hill in the northern portion. Elevation ranges between approximately 1,210 and 1,320 feet above mean sea level (amsl). In the northern portion of the project site, the terrain slopes from the top of the low hills downward to the southwest toward Placerita Creek. In the southern and central portions, the project site gently slopes downward from the southeast to the northwest toward Placerita Creek.

3.1.1 Watershed and Drainages

The project site is located in the Santa Clara River Watershed, within the South Coast Hydrologic Unit (Hydrologic Unit Code [HUC] 18070102), which encompasses approximately 1,629 square miles in Los Angeles and Ventura counties. The Santa Clara River originates in the northern slopes of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and eventually flows into the Pacific Ocean between the cities of San Buenaventura and Oxnard. Significant tributaries within the watershed include Piru, Sespe, Santa Paula, Hopper, Pole, and Castaic Creeks; San Francisquito and Bouquet Canyon; and South Fork Santa Clara River. Hydrology of the Santa Clara River is highly variable, and flows vary seasonally.

The project site specifically occurs within the Upper Santa Clara River Watershed (USCRW) within Santa Clara River Reach 5 (HUC 180701020403), specifically, it is within the South Fork Santa Clara River subwatershed (SFSCRS; HUC 180701020401). The USCRW encompasses a total area of approximately 262,400 acres and the SFSCRS encompasses approximately 28,785 acres. Historical records and current observations indicate that the Upper Santa Clara River, South Fork Santa Clara River, and Placerita Creek generally produce an ephemeral to intermittent flow regime, with flows in response to high intensity rainfall (USFWS 2022c).

Within the northern portion of the project site, Placerita Creek flows from east to west. Two ephemeral drainages running south to northwest occur within the southern portion of the project site, one along the western boundary of the project site (western unnamed drainage) and one along the eastern boundary (eastern unnamed drainage). These drainages converge along the western portion of the project site before exiting through a culvert under the railroad tracks, and eventually draining into Placerita Creek outside the project site. Generally, the aquatic resources have been

mapped by the USFWS NWI (USFWS 2022c) as Riverine and the USGS NHD as Stream/River (USGS 2022) and illustrated in Figure 3.

3.1.2 Soils

The USDA NRCS Web Soil Survey identifies six soil map units that underlie the project site (Figure 4). Overall soil characteristics onsite may differ from the mapped soil types due to past and ongoing surface disturbances. The project site is within the Antelope Valley, California Area (CA675).

Hanford Sandy Loam, 0 to 2 Percent Slopes

The Hanford series consists of very deep, well-drained soils that are typically located on stream bottoms and are formed in sandy alluvium derived from granitic alluvium. The soil profile consists of fine sandy loams. Hanford sandy loam soil is listed as a hydric soil on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Metz Loamy Sand, 0 to 2 Percent Slopes

The Metz series consists of very deep, somewhat excessively drained soils that form in alluvial material derived from predominately sedimentary rocks. This series consists of fine sandy loams and typically occurs on floodplains and alluvial fans. Metz loamy sand soil is listed as a hydric soil on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Riverwash

Riverwash soils are typically sandy, gravelly, or cobbly and are somewhat poorly drained and experience frequent flooding. Riverwash is listed as a hydric soil on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Sorrento Loam, 0 to 2 Percent Slopes

The Sorrento series consists of very deep, well drained, moderately alkaline soils that form in medium textured alluvium from sedimentary formations. Sorrento soils occur on alluvial fans and stabilized floodplains and have a fine-loamy texture. Sorrento loam soil is listed as a hydric soil on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Ojai Loam, 2 to 9 Percent Slopes, and 30 to 50 Percent Slopes

The Ojai series consists of well drained loamy soils that are formed in alluvium derived from sedimentary rock. This soil series often occurs on terraces. Ojai loam soils are listed as hydric soils on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Yolo Loam, 0 to 9 Percent Slopes

The Ojai series consists of very deep, well drained soils that are formed in alluvium of mixed rocks. This soil series often occurs on alluvial fans and floodplains. Yolo loam soils are listed as hydric soils on the NRCS Hydric Soils List (USDA, NRCS 2022b).

Figure 3 NWI and NHD Resources

Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provide by USFW, 2020.

Figure 4 USDA NRCS Soil Survey

Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided SSURGO, 2022.

3.2 Vegetation Communities and Land Cover Types

Six vegetation communities and one land cover type were identified within the project site as described below and depicted in Figure 5. A list of plant species encountered during the 2021 rare plant survey and 2022 field reconnaissance survey is provided in Appendix C.

The CDFW *California Natural Communities List* (2022) identifies natural communities throughout California, and provides global and state rarity ranks. Natural communities having a rank of 1 to 3 are generally considered sensitive, though some communities with other ranks may also be considered sensitive. Two of the vegetation communities, big sagebrush scrub and scale broom scrub, within the project site are considered sensitive by the CDFW (2022).

Wild Oat and Annual Brome Grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance)

Wild oat and annual brome grasslands are found in all topographic settings, including foothills, rangelands, and openings in woodlands between sea level and 7,215 feet amsl. Wild oats (*Avena barbata* and *Avena fatua*), bromes (*Bromus diandrus, Bromus hordeaceus*), and/or barley (*Hordeum murinum*) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover. This vegetation community is not considered sensitive by CDFW (CDFW 2022).

Within the project site, this vegetation community covers the majority of the property and occurs in the large open, flat area and the lower portion of the hills in the central portion of the site. The herbaceous layer is dominated by wild oat, ripgut brome (*Bromus diandrus*), rattail fescue (*Festuca myuros*), and cheat grass (*Bromus tectorum*). Non-native forbs such as perennial mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), horehound (*Marrubium vulgare),* and tocalote (*Centaurea melitensis*) were also observed within this community. Coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) trees are present as occasional, emergent individuals.

California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)

California buckwheat scrub is typically found within upland slopes, intermittently flooded arroyos, channels, and washes, and rarely within flood low-gradient deposits between sea level and 3,940 feet amsl. Soils within this vegetation community are typically coarse, well-drained, and moderately acidic to slightly saline. California buckwheat (*Eriogonum fasciculatum*) comprises at least 50 percent relative cover in the shrub layer. This vegetation community is not considered sensitive by CDFW (CDFW 2022).

This vegetation community is found along the western boundary of the project site. California buckwheat is dominant in the open shrub layer, along with California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*) present as subdominant species. The herbaceous layer is dominated by wild oats, black mustard, and cheat grass. A few individual coast live oak and valley oak trees are present in this community.

Figure 5 Vegetation Communities and Land Cover Types

Vegetation Community	Temporary Impact	Permanent Impacts
Big Sagebrush Scrub	0	1.39
California Buckwheat Scrub	2.13	8.86
Chamise-California Buckwheat Scrub	0	0.61
Disturbed	0	14.6
Giant Reed Break	0.04	0.01
Scale Broom Scrub	0.57	0.002
Wild Oat-Annual Brome Grassland	0.37	62.42
Total	3.11	87.89

Imagery provided by Microsoft Bing and its licensors © 2022.

Chamise- California Buckwheat Scrub (*Adenostoma fasciculata – Eriogonum fasciculatum* Shrubland Association)

Chamise – California buckwheat scrub is found within varied topography, typically within shallow soils over colluvium and many types of bedrock between 30 to 5,900 feet amsl. Chamise (*Adenostoma fasciculata*) and California buckwheat comprise at least 50 percent cover in the shrub layer. This vegetation community is not considered sensitive by CDFW (CDFW 2022).

This vegetation community is found within the northeastern portion of the project site on the northeastern-facing slope of a hill. Chamise is dominant in the dense shrub layer with California buckwheat present as a subdominant species. The herbaceous layer is sparse due to the density of the shrub layer. The herbaceous layer was dominated by miniature lupine (*Lupinus bicolor*), woodland clarkia (*Clarkia unguiculata*), wishbone bush (*Mirabilis bigelovii*), and death camas (*Toxicoscordion fremontii*).

Big Sagebrush Scrub (*Artemisia tridentata* ssp. *parishii* Provisional Shrubland Association)

Big sagebrush scrub is found within a wide variety of habitats including plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, hills, ridges, seasonal and perennial stream channels, and dry washes between 984 and 9,840 feet amsl. Big sagebrush (*Artemisia tridentata* ssp. *parishii*) comprises at least 2 percent cover in the shrub layer, with no other single species with greater cover. This provisional association is ranked G2/S2 by the CDFW and is therefore considered sensitive (CDFW 2022).

This vegetation community is found in several distinct patches south of Placerita Creek. Soils consist of coarse sand. Big sagebrush is dominant in the open shrub layer, along with California buckwheat and California sagebrush. The herbaceous layer is sparse and dominated by perennial mustard. This community appears to have been fragmented by previous off-highway vehicle usage.

Giant Reed Break (*Arundo donax* Semi-Natural Alliance)

This herbaceous semi-natural alliance is found within riparian areas, along low-gradient streams and ditches, and within semi-permanently flooded and slightly brackish marshes and impoundments from sea level to 1,600 feet amsl. Giant reed (*Arundo donax*) dominates the herbaceous layer. Giant reed has a rating of “High” by the California Invasive Plant Council (Cal-IPC 2022), indicating that the species has severe ecological impacts on physical processes, plant and wildlife communities, and vegetation structure. This species’ reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. This vegetation community is not considered sensitive by CDFW (CDFW 2022).

This vegetation community is found within Placerita Creek within the northwestern portion of the project site, adjacent to California buckwheat scrub. The dominant species is giant reed which forms a dense herbaceous layer to the exclusion of all other species.

Scale Broom Scrub (*Lepidospartum squamatum* Shrubland Alliance)

Scale broom scrub is typically found in intermittently or rarely flooded, low-gradient alluvial deposits along streams, washes, and fans at elevations ranging from 160 to 5,000 feet amsl. Scale broom is dominant, co-dominant, or conspicuous in the shrub canopy along with species such as

mule fat, California sagebrush (*Artemisia californica*), and California buckwheat. This vegetation is ranked G3/S3 by the CDFW and is therefore considered sensitive (CDFW 2022).

Within the project site, this community is located within a portion of Placerita Creek that is scoured from intermittent stream flows. The substrate is comprised of gravel, cobble, sand, and scattered woody debris in the main channel of Placerita Creek, with finer silty soils and sparse annual grass and shrub cover on lower terraces. Commonly encountered plant species include native shrubs such as scale broom, California buckwheat, mulefat (*Baccharis salicifolia*) and Palmer's goldenbush (*Ericameria palmeri* var*. pachylepis*), as well as a variety of herbaceous species, such as annual burweed (*Ambrosia acanthicarpa*), telegraph weed (*Heterotheca grandiflora*), and tree tobacco (*Nicotiana glauca*). This community appears to have been disturbed by off-highway vehicle usage.

Disturbed

Disturbed habitats have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation of disturbed areas, if present, is nearly exclusively composed of non-native plants species such as landscape ornamentals or ruderal exotic species that take advantage of disturbance and which removes any capability of providing viable natural habitat for uses other than dispersal (Oberbauer et al. 2008).

Within the project site, disturbed habitat is located along the southeastern boundary and consists of an ornamental tree line along residential development. Disturbed habitat is also present in the northeast portion of the project site and consists of areas that appear to be disturbed by human activity (e.g., off-road vehicle use) and vegetation is mainly comprised of non-native species.

3.3 General Wildlife

A total of 23 wildlife species were observed during the January 2022 field reconnaissance survey, the majority of which are native avian species (Appendix C). Common mammalian species occurring in the region include (but not limited to) mule deer (*Odocoileus hemionus*) and coyote (*Canis latrans*). Common avian species in the region include northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), white-crowned sparrow (*Zonotrichia leucophrys*), among dozens of other resident and migratory species. These mammalian and avian species would be expected to use the project site for foraging, nesting, and/or shelter. The field surveys conducted by Rincon provide only a partial assessment of wildlife species; additional species (both native and non-native) are expected to occur within the project site.

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special-status species and other sensitive biological resources and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed within the project site and evaluates the potential for the project site to support additional sensitive biological resources. Assessments for the potential occurrence of special-status species are 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. The potential for each special-status species to occur in the project site was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Plant or wildlife taxa may have “special-status” due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by the USFWS or by the CDFW and are protected by the FESA and CESA. Others have been identified as sensitive or as special-status species by the USFWS, the CDFW, or by private conservation organizations, including the CNPS.

For the purpose of this BRA, special-status species are those plants and wildlife listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the FESA; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA or Native Plant Protection Act; those recognized as Fully Protected, Species of Special Concern (SSC), or Watch List by the CDFW; those designated as locally important species by the City of Santa Clarita and/or otherwise protected through ordinance or local policy; and plants occurring on lists 1 and 2 of the CNPS CRPR system, per the following definitions:

- **CRPR 1A** = Plants presumed extinct in California
- **CRPR 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)

- **CRPR 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened)
- **CRPR 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened, or no current threats known)
- **CRPR 2** = Rare, threatened or endangered in California, but more common elsewhere
- **CRPR 3** = Review List: Plants about which more information is needed
- **CRPR 4** = Watch List: Plants of limited distribution

In addition, special-status species are ranked globally (G) and sub-nationally (S) 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1** – Critically Imperiled Globally or State-wide
- **G2 or S2** – Imperiled Globally or State-wide
- **G3 or S3** – Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. The current CDFW Sensitive Natural Communities List was referenced to determine the current sensitivity status of the vegetation alliances found within the project site. The list provides the current G and S rank for each community and indicates whether CDFW considers the community to be sensitive (CDFW 2021).

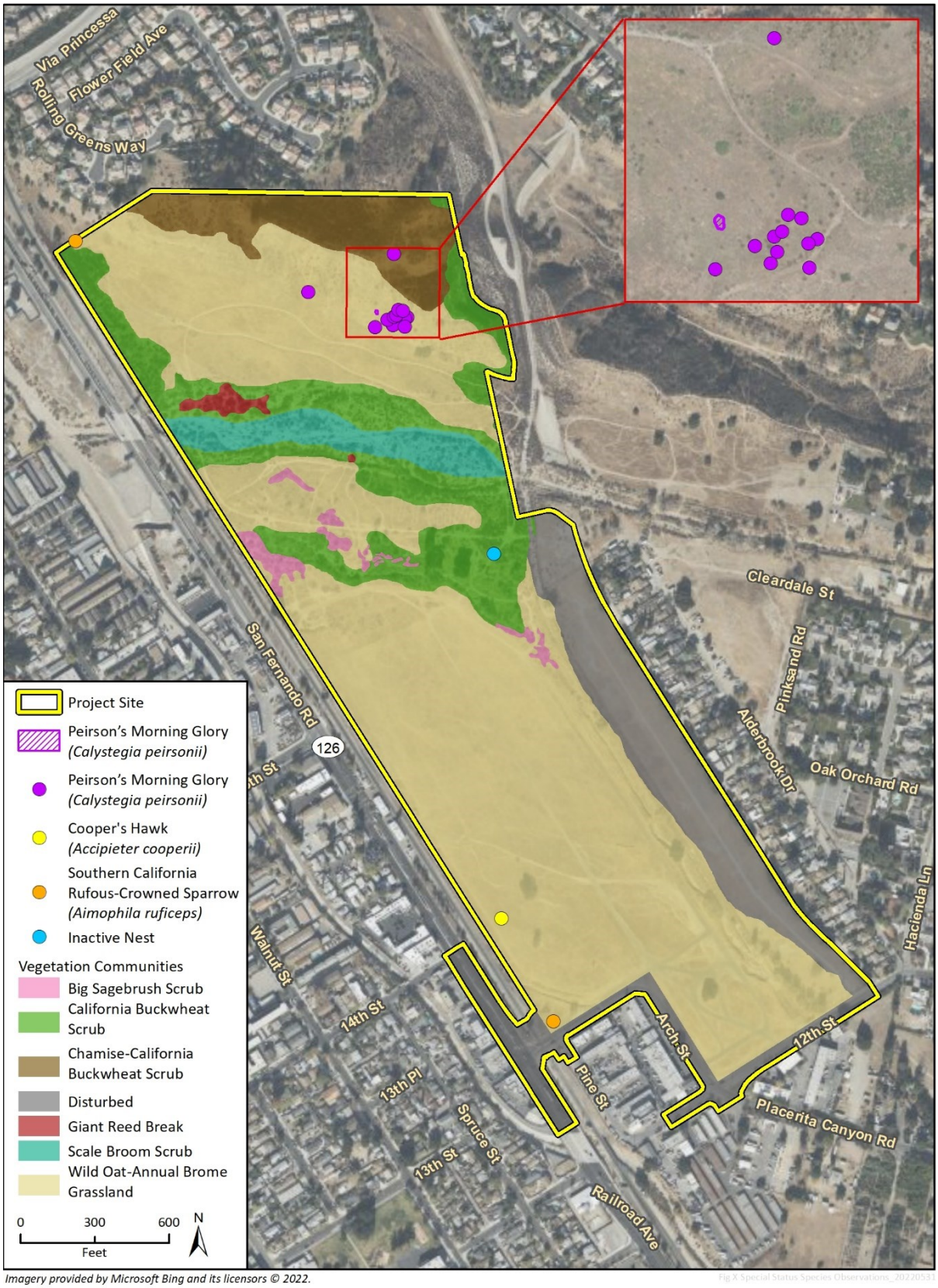
4.1 Special-Status Species

4.1.1 Special-Status Plant Species

Special-Status Plant Species Observed

No plant species listed as rare, threatened, or endangered under CESA or FESA, or special-status plants, were observed within the project site during the rare plant surveys and jurisdictional delineation, or during the 2022 reconnaissance survey. However, biologists identified a Peirson's morning-glory (*Calystegia peisonii;* CRPR 4.2) growing along the ridge on the northern side of the property (Figure 6) within wild oat and annual brome grassland during the 2021 rare plant survey. This species is not State or federally protected; however, it is ranked by the CNPS as a CRPR 4.2 species. Plants with a CRPR of 4.2 are of limited distribution or are infrequent throughout a broader area in California and are considered moderately threatened within the state. These plants typically do not warrant consideration under CEQA Guidelines unless the specific circumstances relevant to local distributions make them of potential scientific interest. Some local agencies may also consider and list additional plant species to be of "local concern" because of local or regional scarcity as determined by that agency per the CEQA Guidelines; however, the City of Santa Clarita does not have such a list. Peirson's morning-glory is relatively widespread in the local vicinity of the project site (Calflora 2022).

Figure 6 Sensitive Species Observations



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Special-Status Plant Species with Potential to Occur

Based on the database and literature review, 42 special-status plant species have been recorded within a nine USGS quadrangle query (Appendix B). Of these, one was observed (Peirson's morning glory); however, 18 have a low potential to occur within the project site based on the presence of marginally suitable habitat, none of which were observed during focused botanical surveys from 2015 to 2022. The remaining 23 special-status plant species are not expected to occur based on incompatible habitat conditions (e.g., vegetation assemblage, soils, topography, hydrology, and prior disturbances).

4.1.2 Special-Status Wildlife Species

Special-Status Wildlife Species Observed

Two special-status wildlife species were observed within the project site during the January 20, 2022, reconnaissance survey: southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List [WL]) and Cooper's hawk (*Accipiter cooperii*; WL). Additionally, one special-status wildlife species, yellow warbler (*Setophaga petechia;* SSC), was observed incidentally during a site walk on April 27, 2022, by Michael Baker International.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow is a WL species that occurs in southern California coastal sage scrub and sparse mixed chaparral. The project site contains suitable buckwheat scrub, chamise-buckwheat scrub, and big sagebrush scrub habitat that provides appropriate nesting substrate for this species. Two observations of southern California rufous-crowned sparrows were recorded within wild oat and annual brome grassland and buckwheat scrub during the January 2022 reconnaissance survey (Figure 6).

Cooper's Hawk

Cooper's hawk is a WL species typically found in open, interrupted, or marginal type woodlands in the western United States. This species nests in riparian growths of deciduous trees in canyon bottoms or river flood plains, or in live oak trees. 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 (Figure 6); however, a nest was not observed.

Yellow Warbler

Yellow warbler (*Setophaga petechia*) is an SSC species that is found in coastal regions from Del Norte County to San Diego County. This species breeds in riparian woodlands from coastal and desert lowlands as well as montane chaparral and in open mixed conifer habitats (Garrett and Dunn 1981). It is often found in riparian plant associations in close proximity to water. This species frequently nests and forages in willow shrubs and thickets.

As indicated above, an individual yellow warbler was incidentally observed foraging near Placerita Creek during a site walk in April 2022. The individual observed in April 2022 is likely a migrating individual as there is no nesting habitat at the project site suitable for yellow warbler.

Special-Status Wildlife Species with Potential to Occur

Based on the database and literature review, 47 special-status wildlife species have been recorded or have the potential to occur within a five-mile radius of the project site (Appendix B). Of these, 21 species are present or have potential to occur on the project site, including three species observed on site during surveys in 2022 (southern California rufous-crowned sparrow, Cooper's hawk, and yellow warbler), five species with a high potential, two with a moderate potential, and 11 with a low potential based on the presence of habitat suitability or direct observations. A detailed description of each species with moderate to high potential to occur is discussed below. Species with a low potential to occur are omitted from further discussion because there are limited habitat components meeting the species requirements, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality, the species was not observed during field surveys, and/or the species is not likely to be found on the site.

The remaining 26 special-status wildlife species are not expected to occur because the site does not support their required habitat components and/or is not within the known range of the species. The species that can be reasonably anticipated to occur were determined based on the published ranges of the species, and the type, extent, and condition of habitat available at the site.

In addition to the seven species with moderate to high potential to occur, descriptions of burrowing owl and coastal California gnatcatcher are also discussed below.

California Legless Lizard

California legless lizard (*Anniella* spp.) is an SSC species found in the Coast Ranges from Contra Costa County to the Mexican border. The species occurs in a variety of habitats including sparsely vegetated areas of coastal dunes, valley foothill grasslands, chaparral, and coastal scrub that contain sandy or loose organic soils with leaf litter and moist soils for burrowing. Areas disturbed by agriculture or other human uses are typically not suitable habitat for the species (Zeiner 1990).

Numerous CNDDB occurrences of the species have been documented within a five-mile radius of the project site. The project site contains chaparral and scrub habitats with loose loamy soils suitable for the species. The reach of Placerita Creek within the project site contains moist soils suitable for the species; therefore, California legless lizard has a high potential to occur within the project site.

Coastal Whiptail

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is an SSC species that is found in deserts and semi-arid areas with sparse vegetation within Ventura, Los Angeles, Riverside and San Diego Counties. The species is commonly found in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grasslands (Zeiner 1990).

Several CNDDB occurrences have been documented within five miles of the project site, including one relatively recent occurrence from 2005 approximately 1.6 miles northeast of the project site. Big sagebrush scrub, wild oat and annual brome grasslands, California buckwheat scrub, chamise-California buckwheat scrub, and scale broom scrub in the project site provide potentially suitable for this species; therefore, coastal whiptail has a high potential to occur.

Coast Horned Lizard

Coast horned lizard (*Phrynosoma blainvillii*) is an SSC that can be found in grasslands, coniferous forests, woodlands, and chaparral habitats containing open areas and patches of loose soil. There are numerous CNDDB records within the regional vicinity of the project site. The project site contains suitable open areas for sunning, shrubs for cover, and loose soil for burial. Therefore, coast horned lizard has a high potential to occur within the project site.

Bell's Sage Sparrow

Bell's sage sparrow (*Artemisiospiza belli belli*) is a WL species that nests in chaparral habitats dominated by fairly dense stands of chamise. It also occurs in coastal sage scrub habitats in the southern portion of its range. Nests are located on the ground beneath a shrub or in a shrub 6 to 8 inches above the ground (Garrett and Dunn 1981).

There are numerous CNDDB records within the regional vicinity of the project site. In addition, the project site contains suitable habitat within the chamise-California buckwheat scrub. Therefore, Bell's sage sparrow has a high potential to occur within the project site.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is an SSC that requires underground burrows or occasionally, other cavities, for nesting, roosting, and cover. Burrows used by the owls are usually dug by other species, known as host burrowers. California ground squirrel burrows are frequently used by burrowing owls, but they may also use dens or holes dug by other fossorial species including American badger and canid species. In some instances, owls have been known to excavate their own burrows. Natural rock cavities, debris piles, culverts, and pipes also are used for nesting and roosting (CDFW 2012).

Two recent CNDDB occurrences have been documented within 5 miles of the project site. Numerous California ground squirrel burrows were observed throughout the project site that are potentially suitable for burrowing owls. However, no burrowing owl or sign thereof were detected during focused burrowing owl surveys conducted in 2022 (Rincon 2022b).

California Horned Lark

California horned lark (*Eremophila alpestris actia*) is a WL species that is found in coastal regions from Sonoma County to San Diego County, as well as the main part of the San Joaquin Valley. This species inhabits chaparral, short-grass prairies, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats (Garrett and Dunn 1981).

The nearest recent CNDDB occurrence is approximately five miles northwest of the project site. The project site contains suitable habitat within the non-native grasslands primarily in the southern portion. Therefore, California horned lark has a moderate potential to occur within the project site.

Loggerhead Shrike

Loggerhead shrike (*Lanius ludovicianus*) is an SSC species that inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub, and washes. This species prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting (Garrett and Dunn 1981).

There are numerous recent CNDDB occurrences in the regional vicinity of the project site. In addition, the project site contains suitable scrub habitats. Loggerhead shrike has a high potential to occur within the project site primarily in the winter due to the steep decline of the breeding population of this species in southern California over the last few decades.

Coastal California Gnatcatcher

Coastal California gnatcatcher (CAGN; *Polioptila californica californica*) is a federally threatened species and an SSC that is an obligate, permanent resident of coastal sage scrub habitats in southern California. Its range extends from Ventura County south to northwest Baja California, Mexico (Atwood et al. 1999). It is strongly associated with coastal sage scrub habitat below 820 feet in coastal areas and between 820 and 1,640 feet in inland areas; however, not all types of coastal sage scrub communities are used or preferred (Atwood and Bolsinger 1992). This species appears to be most abundant in areas dominated by California sagebrush and California buckwheat. The breeding season extends from late February through August with peaks nesting in mid-March to mid-May (USFWS 2010). The nearest designated critical habitat for the species is located approximately 2 miles south of the project site (USFWS 2022b).

The project site contains marginal quality habitat for the species in the big sagebrush scrub and California buckwheat scrub vegetation communities. In addition, the nearest CNDDB occurrence was recorded in 2019 approximately 1.6 miles northeast of the project site. No CAGN were detected during focused breeding season surveys conducted at the project site in 2022 (Rincon 2022c).

San Diego Black-Tailed Jackrabbit

San Diego black tailed jackrabbit (*Lepus californicus bennettii*) is an SSC that inhabits a wide range of habitats including desert shrublands, sagebrush, chaparral, oak woodland with an herb mosaic component. This species occurs from coastal southern California to Baja California. The species requires a mix of grasses, forbs and shrubs for foraging and prefers predominantly open areas without dense understory (Howard 1995).

The closest CNDDB record was recorded in 2005 approximately 6.2 miles northwest of the project site. In addition, the project site contains suitable open shrub habitats and friable soils for burrow excavations. Therefore, this species has a moderate potential to occur within the project site.

4.1.3 Nesting Birds

The project site contains suitable habitat to support regulated nesting birds and raptors protected under the CFGC 3503, 3503.5, and 3513, and the MBTA (16 United States Code §§ 703-712). Potential nesting habitat for birds and raptors were observed throughout the project site, with the most suitable locations being mature coast live oak and valley oak trees and scrub vegetation. A single, inactive passerine nest was observed within a coast live oak tree within the project site during the reconnaissance survey (Figure 5).

4.2 Sensitive Plant Communities and Critical Habitats

Sensitive Natural Communities

The project site contains two sensitive plant communities: big sagebrush scrub (G2/S2) and scale broom scrub (G3/S3) (CDFW 2022). These stands of sensitive vegetation communities are subject to

ongoing disturbance due to off-highway vehicle usage and fragmentation due to surrounding commercial and residential land uses.

Designated Critical Habitat

No designated critical habitat occurs within the project site. The nearest designated critical habitat is for coastal California gnatcatcher located approximately two miles south of the project site (USFWS 2022b), beyond existing urban development to the south.

4.3 Jurisdictional Waters and Wetlands

A formal jurisdictional delineation of potential jurisdictional waters and wetlands was conducted in June 2021 (Rincon Consultants 2021a; Appendix E). Areas potentially subject to the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act, the Los Angeles RWQCB pursuant to Section 401 of the Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), and CDFW pursuant to CFGC 1600 were assessed during the literature review and jurisdictional delineation survey. Results of the research and field visit determined Placerita Creek streambed is potentially subject to USACE, RWQCB, and CDFW jurisdictions, while the ephemeral drainages within the project site are potentially subject to RWQCB and CDFW jurisdictions (Table 1). A map illustrating the jurisdiction limits within the project site is presented as in Figure 7.

Table 1 Jurisdictional Resources within the Project site

	USACE Non-Wetland Waters of the U.S.		RWQCB Non-Wetland Waters of the State		CDFW Streambed and Associated Riparian Habitat	
Feature	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**
Placerita Creek	0.97	1,435	0.97	1,435	9.82	1,435
Western Ephemeral Drainage	0	0	1.08	2,615	1.08	2,615
Eastern Ephemeral Drainage	0	0	1.18	2,937	1.18	2,937
Total	**0.97**	**1,435**	**3.23**	**6,987**	**12.08**	**6,987**

4.4 Wildlife Movement

Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Examples of barriers or impediments to movement include housing and other development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Regional and local wildlife movements are generally concentrated near topographic features that allow convenient passage, including roads, drainages, and ridgelines.

The reach of Placerita Creek present at the project site is a tributary to Newhall Creek and ultimately to the Santa Clara River. Placerita Creek may provide movement pathways for mobile species such as mule deer and coyote.

Figure 7 Potentially Jurisdictional Resources Impacts – Placerita Creek (Overview)

	Placerita Creek		West Drainage	East Drainage
	Permanent Impacts	Temporary Impacts	Permanent Impacts	Permanent Impacts
Non-Wetland Waters of the U.S./State	0.048 Ac./130 Lin. Ft.	0.24 Ac./1,268 Lin. Ft.		
CDFW Streambed	0.511 Ac./841 Lin. Ft.	3.89 Ac./5,807 Lin. Ft.	1.08 Ac./2615 Lin. Ft.	1.18 Ac./2937 Lin. Ft.
Non-Wetland Waters of the State			1.08 Ac./2615 Lin. Ft.	1.18 Ac./2937 Lin. Ft.

Fig6 Jurisdictional Delineation_Buried Rock

4.5 Resources Protected by Local Policies and Ordinances

City of Santa Clarita General Plan

Natural resources within Santa Clarita limits are regulated according to the City's General Plan (City of Santa Clarita 2011), which includes policies regarding conservation of biological resources and ecosystems, as well as protection of sensitive habitat (including wildlife corridors) and endangered species. The following objectives and policies related to biological resources are relevant for the proposed project (based on its location and/or proposed activities):

Objective CO 3.1: In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.

- **Policy CO 3.1.1**: On the Land Use Map and through the development review process, concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss, to the extent feasible.
- **Policy CO 3.1.2:** Avoid designating or approving new development that will adversely impact wetlands, floodplains, threatened or endangered species and habitat, and water bodies supporting fish or recreational uses, and establish an adequate buffer area as deemed appropriate through site specific review.
- **Policy CO 3.1.3:** On previously undeveloped sites ("greenfields"), identify biological resources and incorporate habitat preservation measures into the site plan, where appropriate. (This policy will generally not apply to urban infill sites, except as otherwise determined by the reviewing agency).
- **Policy CO 3.1.4:** For new development on sites with degraded habitat, include habitat restoration measures as part of the project development plan, where appropriate.
- **Policy CO 3.1.5:** Promote the use of site-appropriate native or adapted plant materials and prohibit use of invasive or noxious plant species in landscape designs.
- **Policy CO 3.1.6:** On development sites, preserve and enhance natural site elements including existing water bodies, soil conditions, ecosystems, trees, vegetation and habitat, to the extent feasible.
- **Policy CO 3.1.7:** Limit the use of turf-grass on development sites and promote the use of native or adapted plantings to promote biodiversity and natural habitat.
- **Policy CO 3.1.8:** On development sites, require tree planting to provide habitat and shade to reduce the heat island effect caused by pavement and buildings.
- **Policy CO 3.1.9:** During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.
- **Policy CO 3.1.10:** To the extent feasible, encourage the use of open space to promote biodiversity.
- **Policy CO 3.1.11:** Promote use of pervious materials or porous concrete on sidewalks to allow for planted area infiltration, allow oxygen to reach tree roots (preventing sidewalk lift-up from roots seeking oxygen), and mitigate tree-sidewalk conflicts, in order to maintain a healthy mature urban forest.

Objective CO 3.2: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.

- **Policy CO 3.2.3:** Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.

Objective CO 3.3: Protect significant wildlife corridors from encroachment by development that would hinder or obstruct wildlife movement.

Objective CO 3.5: Maintain, enhance, and manage the urban forest throughout developed portions of the Santa Clarita Valley to provide habitat, reduce energy consumption, and create a more livable environment.

- **Policy CO 3.5.1:** Continue to plant and maintain trees on public lands and within the public right-of-way to provide shade and walkable streets, incorporating measures to ensure that roots have access to oxygen at tree maturity, such as use of porous concrete.
- **Policy CO 3.5.2:** Where appropriate, promote planting of trees that are native or climactically appropriate to the surrounding environment, emphasizing oaks, sycamores, maple, walnut, and other native species in order to enhance habitat, and discouraging the use of introduced species such as eucalyptus, pepper trees, and palms except as ornamental landscape features.

Objective CO 3.6: Minimize impacts of human activity and the built environment on natural plant and wildlife communities.

- **Policy CO 3.6.1:** Minimize light trespass, sky-glow, glare, and other adverse impacts on the nocturnal ecosystem by limiting exterior lighting to the level needed for safety and comfort; reduce unnecessary lighting for landscaping and architectural purposes and encourage reduction of lighting levels during nonbusiness nighttime hours.
- **Policy CO 3.6.2:** Reduce impervious surfaces and provide more natural vegetation to enhance microclimates and provide habitat.

Protected Oak Trees

The City of Santa Clarita Oak Tree Preservation Ordinance (Municipal Code 17.51.040) protects and preserves oak trees in the City and provides regulatory measures to accomplish this purpose. This policy applies to the removal, pruning, cutting, and/or encroachment into the protected zone of oak trees. The following definitions are provided in the ordinance:

- "Oak tree" means any oak tree of the genus *Quercus*, including, but not limited to, valley oak (*Quercus lobata*), California live oak, canyon oak (*Quercus chrysolepis*), interior live oak (*Quercus wislizenii*), and scrub oak (*Quercus dumosa*), regardless of size.
- "Heritage oak tree" means any oak tree measuring one hundred eight (108) inches or more in circumference or, in the case of a multiple trunk oak tree, two (2) or more trunks measuring seventy-two (72) inches each or greater in circumference, measured four and one-half (4 ½) feet above the natural grade surrounding each tree. In addition, the Commission and/or Council may classify any oak tree, regardless of size, as a heritage tree if it is determined by a majority vote thereof that such tree has exceptional historic, aesthetic, and/or environmental qualities of major significance or prominence to the community.

- "Oak tree protected zone" means a specifically defined area totally encompassing an oak tree which work activities are strictly controlled. Using the dripline as a point of reference, the protected zone shall commence at a point five (5) feet outside of the dripline and extend inward to the trunk of the tree. In no case shall the protected zone be less than fifteen (15) feet from the trunk of an oak tree.

An Oak Tree Permit is required to cut, prune, remove, relocate, endanger, damage, or encroach into the protected zone of any oak tree on any public or private property within the City. Oak trees that do not exceed six (6) inches in circumference when measured at a point 4 ½ feet above the tree's natural grade are exempt from the Oak Tree Permit.

An inventory and evaluation of protected oak trees within the project site was conducted on June 24, 2021, by Arbor Essence (Arbor Essence 2021; Appendix G). This study concluded there are six heritage coast live oak trees, six non-heritage coast live oak trees, one heritage valley oak tree, and three non-heritage valley oak trees within the project site. Proposed development within the project site will remove a total of 13 oak trees that are located within the footprint of proposed buildings and grading. Therefore, an Oak Tree Permit will be required prior to removal of the thirteen oak trees.

Protected Trees

Native trees are protected under the City's Parkway Trees Ordinance (City of Santa Clarita Municipal Code 13.76). Pursuant to the Ordinance, a tree permit must be obtained prior to damaging or removing any protected trees that are:

- "Exceptional specimen tree" means a tree considered an outstanding specimen of its species by reason of age, rarity, location, size, aesthetic quality, endemic status, or unique character, and so designated by resolution of the City Council.
- "Habitat tree" means a tree (or any group of trees) which has special importance as a wildlife habitat, and so designated by resolution of the City Council.
- "Historic tree" shall mean a living tree in association with some event or person of historical significance to the community or because of special due to size, condition or aesthetic qualities, and so designated by resolution of the City Council.
- "Indigenous tree" means a tree which occurs naturally in the City, and so designated by resolution of the City Council.

Additionally, the Ordinance defines a tree as a woody plant that has the potential of attaining a minimum height of fifteen feet and has a canopy of foliage borne normally by a single trunk.

Numerous non-native trees (i.e., tree of heaven) are located within the project site; however, these trees are not protected by the City's Parkway Tree Ordinance.

Significant Ecological Areas

The City's General Plan and Municipal Code (Section 17.38.080) includes treatment of the Significant Ecological Areas (SEAs) Overlay Zone as among the habitat types within the city. SEAs are "defined as ecologically important land and water systems that are valuable as plant or animal communities, often important to the preservation of threatened and endangered species, and conversation of biological diversity in the County" (City of Santa Clarita 2011). The City of Santa Clarita's Municipal

Code Section 17.38.080 requires a conformance review for development within the SEA Overlay Zone. No SEAs are present in the project site.

4.6 Habitat Conservation Plans

The project site is not located within any Habitat Conservation Plans (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan area.

5 Impact Analysis and Recommended Mitigation Measures

This section discusses potential adverse impacts to biological resources in accordance with CEQA Biological Resources Thresholds defined by the CEQA Guidelines Appendix G Initial Study Checklist. Impacts considered include those that may occur from implementation of the proposed project. Recommended avoidance, minimization, and mitigation measures are provided that would reduce potential impacts to less than significant levels.

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

> Have 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Special-Status Plant Species

As discussed in Section 4.1.1, the CNDDB and CNPS query results include 42 special-status plant species within a 9-quadrangle search of the project site. However, 23 of these species occur outside the elevation range of the project site or require habitat conditions that are absent. Peirson's morning-glory (CRPR 4.2), was observed within the project site during the 2021 rare plant survey. Plants with a CRPR of 4.2 do not warrant consideration in accordance with CEQA Guidelines §15380 unless the specific circumstances relevant to local distributions make them of potential scientific interest. The City of Santa Clarita does not have such a list. The remaining 18 species have a low potential to occur within the project site based on marginally suitable habitat and lack of detection during focused botanical surveys from 2015 to 2022.

Special-Status Wildlife Species

As discussed in Section 4.1.2, three special-status wildlife species were observed within the project site: southern California rufous-crowned sparrow (WL), Cooper's hawk (WL), and yellow warbler (SSC). In addition, seven special-status wildlife species have a moderate to high potential to occur within the project site based on known ranges, habitat preferences for the species, and species occurrence records in the vicinity of the project site as documented in CNDDB. These seven special-status species include California legless lizard (SSC), coastal whiptail (SSC), coast horned lizard (SSC), Bell's sage sparrow (WL), California horned lark (WL), loggerhead shrike (SSC), and San Diego black-tailed jackrabbit (SSC).

Potentially suitable habitat for these special-status wildlife species will be impacted by the proposed project. Therefore, implementation of the proposed project has the potential to result in direct impacts occurring during initial ground-disturbing activities or indirect adverse impacts to special-status wildlife species if present. Recommended measures to avoid, minimize, or mitigate impacts to special-status wildlife to a less than significant level are described below.

Neither burrowing owl nor California gnatcatcher were detected during protocol-level focused species surveys conducted in 2022 at the project site (Rincon 2022b, 2022c). Therefore, impacts to these species are not anticipated and are not discussed further.

Nesting Birds

Many common bird species were observed within the project site. Native birds protected in accordance with by the MBTA and CFGC may nest on site, including the special-status avian species mentioned above. Construction activities have the potential to directly impact nesting birds via the destruction of nests or disturbances leading to nest failure. Recommended mitigation measures for avoidance, minimization, and mitigation of impacts to these species are described below.

Recommended Avoidance, Minimization, and Mitigation Measures

BIO-1 General Best Management Practices

General requirements which should be followed by construction personnel are listed below.

- 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 proposed 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 will 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 Best Management Practices (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.

BIO-2 Qualified Biological Monitor

A qualified biological monitor familiar with special-status species with potential to occur on the project site will 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 will then relocate these individuals to suitable undisturbed habitat, outside the areas directly and indirectly affected by ground disturbance activities.

BIO-3 NESTING BIRDS

Project-related 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 pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (500-for for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird survey will be required prior to each phase of construction.

Pre-construction nesting bird surveys should 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 pre-construction surveys, no further actions would be necessary.

5.2 Sensitive Plant Communities

The proposed project would have a significant effect on biological resources if it would:

> Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.

Two sensitive plant communities, big sagebrush scrub and scale broom scrub, were recorded in the project site. Temporary and permanent impacts to sensitive vegetation communities are provided in Table 2. While the habitat value of these sensitive communities is reduced by fragmentation and anthropogenic disturbances, impacts would be significant without mitigation. Implementation of Mitigation Measure BIO-4 will compensate for impacts to sensitive plant communities.

Table 2 Vegetation Community and Land Cover Impacts

Vegetation Community/Land Cover	Acres within Project site	Permanent Impacts (acres)	Temporary Impacts (acres)
Big Sagebrush Scrub (G2/S2)	1.39	1.39	0.00
Scale Broom Scrub (G3/S3)	4.00	0.002	0.57
Total	5.39	1.392	0.57

Recommended Avoidance, Minimization, and Mitigation Measures

BIO-4 SENSITIVE VEGETATION COMMUNITY COMPENSATION

Impacts to sensitive vegetation communities shall be avoided to the greatest extent feasible. Mitigation for unavoidable impacts to sensitive vegetation communities can be accomplished either through onsite restoration, offsite restoration, or purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., onsite restoration). . Compensatory mitigation for unavoidable 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 CDFW prior to issuance of a grading permit. If onsite or offsite restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW prior to initiating impacts. At 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 (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

> Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Placerita Creek and the two unnamed ephemeral drainages within the project site are potentially subject to the jurisdiction of USACE, RWQCB, and CFDW. A total of 0.97 acres (1,435 linear feet) of non-wetland waters of the U.S. occur within the project site, as illustrated in Figure 7. No wetland waters of the U.S. were identified in the project site. A total of 3.23 acres (6,987 linear feet) of waters of the state occur within the project site. No isolated wetland waters of the state were identified within the project site. A total of 12.08 acres (6,987 linear feet) of CDFW streambed and associated riparian habitat occur within the project site, as illustrated in Figure 7. Permanent and temporary impacts to jurisdictional features included below in Table 3 and Table 4.

Table 3 Permanent Impacts to Jurisdictional Areas

Feature	USACE Non-Wetland Waters of the U.S. (acres/linear feet)	RWQCB Non-Wetland Waters of the State (acres/linear feet)	CDFW Streambed and Associated Riparian Habitat (acres/linear feet)
Placerita Creek	0.048/130	0.048/130	0.51/841
Western Ephemeral Drainage	0	1.08/2,615	1.08/2,615
Eastern Ephemeral Drainage	0	1.18/2,937	1.18/2,937
Total	**0.048/130**	**2.308/5,682**	**2.77/6,393**

Table 4 Temporary Impacts to Jurisdictional Areas

Feature	USACE Non-Wetland Waters of the U.S. (acres/linear feet)	RWQCB Non-Wetland Waters of the State (acres/linear feet)	CDFW Streambed and Associated Riparian Habitat (acres/linear feet)
Placerita Creek	0.235/1,268	0.235/1,268	3.89/5,807
Western Ephemeral Drainage	0	0	0
Eastern Ephemeral Drainage	0	0	0
Total	**0.235/1,268**	**0.235/1,268**	**3.89/5,807**

Recommended Avoidance, Minimization, and Mitigation Measures

BIO-5 JURISDICTIONAL WATERS AND WETLANDS

- Permits for the proposed impacts to jurisdictional water shall be obtained prior to initiating impacts. The discharge of fill into USACE jurisdictional areas will require a permit pursuant to Section 404 of the Clean Water Act and a 401 Certification from the Regional Water Quality Control Board, and any modification to a streambed, including removal of riparian vegetation, will require a Streambed Alteration Agreement from CDFW pursuant to Section 1600 of the CFGC. The project shall comply with the mitigation required in accordance with the Streambed Alteration Agreement and the 401 and 404 permits.
- During construction, heavy equipment shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used on site shall be properly maintained such that no leaks of oil, fuel, or residues will take place. Provisions shall be in place to remediate any accidental spills, such as drip pans and standard operating procedures.
- Compensatory mitigation for permanent impacts to Placerita Creek and the two unnamed ephemeral drainages can be accomplished either through purchase of credits through an approved Mitigation Bank or through applicant sponsored mitigation (e.g., onsite restoration). Compensatory mitigation shall be determined and approved by CDFW, USACE and RWQCB prior to impacting state of federally regulated waters. If onsite restoration would occur, a Restoration Plan shall be prepared and submitted for approval by CDFW, USACE and RWQCB prior to initiating impacts. At 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 (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

> Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

No regional wildlife linkages or corridors are mapped within the project site. Local wildlife likely uses Placerita Creek within the project site for movement. The introduction of human disturbance associated with construction of the project may temporarily dissuade wildlife from utilizing the corridor; however, development of the project site would not create a significant barrier for wildlife movement. The project site is located in an overall fragmented landscape given the presence of a railroad to the west, major roads in the immediate vicinity, and residential development to the north and east. In addition, the project site is not within any areas mapped as Essential Connectivity Areas by the California Essential Habitat Connectivity Project (Spencer et al. 2010). Therefore, potential impacts on wildlife movement would be less than significant and no mitigation is recommended.

5.5 Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

City of Santa Clarita General Plan and Oak Tree Preservation Ordinance

The City's General Plan contains objectives and policies for biological resources that are relevant to the proposed project given its location and/or proposed activities. As identified above, these objectives and policies focus on conservation of existing natural areas; restoration of damaged natural vegetation; protection of wetlands, oak trees and other indigenous woodlands, and endangered or threatened species and habitat; and protection of biological resources in SEAs and significant wildlife corridors.

In compliance with the objectives and policies outlined above, the project would not impact SEA or wildlife movement corridors.

Sixteen oak trees protected by the City's Oak Tree Preservation Ordinance are present within the project site. The project proposes to remove 13 of these trees, which includes seven heritage trees.

Impacts to resources protected by local policies and ordinances resulting from implementation of the proposed project would be potentially significant, but may be reduced by BIO-1, BIO-2, BIO-3, BIO-5, and BIO-6.

Recommended Avoidance, Minimization, and Mitigation Measures

BIO-6 OAK TREE PERMIT

An oak tree permit will be required for proposed impacts to the 13 oak trees that meet the City's protected oak tree definitions described in Section 4.5. The permit may require that the impacted oak tree be relocated on site or off site, or the planting of new trees on site or off site to offset the loss of a tree. The permit may also require the payment of a fee or donation of boxed trees to the City or another approved public agency. The fee or boxed trees will be equivalent value to the type of oak trees removed from the project site.

5.6 Adopted or Approved Plans

The proposed project would have a significant effect on biological resources if it would:

> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

The project site does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no mitigation measures are recommended.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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8 List of Preparers

Rincon Consultants, Inc.

Primary Author

- Sarah Toback, Biologist

Secondary Author

- Katherine Christensen, Biologist

Technical Review

- Robin Murray, Senior Biologist
- Greg Ainsworth, Natural Resources Director

Graphics

- Jon Montgomery, GIS Specialist
- Keelie Rocker, GIS Analyst

Publishing

- Yaritza Ramirez, Publishing Specialist
- Luis Apolinar, Publishing Specialist

Field Reconnaissance Survey

- Sarah Toback, Biologist
- Katherine Christensen, Biologist

Jurisdictional Evaluation

- Thea Benson, Biologist
- Malek Al-Marayati, Biologist

Rare Plant Survey

- Daniel Lenz, Biologist
- Genelle Watkins, Biologist

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Appendix A

Regulatory Setting

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- National Marine Fisheries Service (marine animals and anadromous fishes);
- Los Angeles Regional Water Quality Control Board (waters of the State);
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources);
- City of Santa Clarita

United States Army Corps of Engineers

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," which dates from 1986, remains in effect albeit with supplemental guidance interpreting applicable court decisions as described below.

Waters of the U.S.

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea; and,
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

HYDROPHYTIC VEGETATION

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty

percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

HYDRIC SOILS

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

WETLAND HYDROLOGY

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Applicable Case Law and Agency Guidance

The USACE's regulations defining "waters of the United States" have been subject to legal interpretation, and two influential Supreme Court decisions have narrowed the definition to exclude certain classes of waters that bear an insufficient connection to navigable waters. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001), the United States Supreme Court stated that the USACE's CWA jurisdiction does not extend to ponds that "are not adjacent to open water." In reaching its decision, the Court concluded that the "Migratory Bird Rule," which served as the basis for the USACE's asserted jurisdiction, was not supported by the CWA. The Migratory Bird Rule extended CWA jurisdiction to intrastate waters "which are or would be used as habitat by birds protected by Migratory Bird Treaties or which are or would be used as habitat by other migratory birds which cross state lines…" The Court was concerned that application of the

Migratory Bird Rule resulted in "reading the term 'navigable waters' out of the statute. Highlighting the language of the CWA to determine the statute's jurisdictional reach, the Court stated, "the term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made." This decision stands for the proposition that non-navigable isolated, intrastate waters are not waters of the United States and thus are not jurisdictional under the CWA.

In 2006, the United States Supreme Court decided *Rapanos v. United States* and *Carabell v. United States* (collectively "Rapanos"), which were consolidated cases determining the extent of CWA jurisdiction over waters that carry only an infrequent surface flow. The court issued no majority opinion in Rapanos. Instead, the justices authored five separate opinions including the "plurality" opinion, authored by Justice Scalia (joined by three other justices), and a concurring opinion by Justice Kennedy. To guide implementation of the decision, the USACE and USEPA issued a joint guidance memorandum ("Rapanos Guidance Memorandum") in 2008 stating that "regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied."

According to the plurality opinion in Rapanos, "the waters of the United States include only relatively permanent, standing or flowing bodies of water" and do not include "ordinarily dry channels through which water occasionally or intermittently flows." In addition, while all wetlands that meet the USACE definition are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

Under Justice Kennedy's opinion, "the USACE's jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. Wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'" Justice Kennedy identified "pollutant trapping, flood control, and runoff storage" as some of the critical functions wetlands can perform relative to other waters. He concluded that, given wetlands' ecological role, "mere adjacency" to a non-navigable tributary was insufficient to establish CWA jurisdiction, and that "a more specific inquiry, based on the significant nexus standard, is therefore necessary."

Interpreting these decisions, and according to the Rapanos Guidance Memorandum, the USACE and USEPA will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Where a significant nexus analysis is required, the USACE and USEPA will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and,
- Significant nexus includes consideration of hydrologic and ecologic factors.

The USACE and USEPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and,
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected;
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and,
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA

Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

- The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and,
- The area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered animal species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan)

of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments;
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes; or,
3. New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTRA requires the USFWS to publish a list of all non-native, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA's protections extend to candidate species during the period (typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References "river," "stream," and "lake"
  - References "natural flow"
  - References "bed," "bank," and "channel"
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM

- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation
- **Guidance documents**, including A Field Guide to Lake and Streambed Alteration Agreements (CDFG 1994) and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

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Appendix B

Site Photographs

Photograph 3. North facing photo of giant reed habitat along the northern bank of Placerita Creek.

Photograph 4. East facing photo of wild oat grasslands along the hillside in the northern portion of the study area.

Photograph 5. East facing photo within the Placerita Creek streambed.

Photograph 6. South facing photo along the eastern boundary of the study area showing wild oat grassland habitat.

Photograph 7. North facing photo from the southeast corner of the study area of wild oat grassland habitat.

Photograph 8. Photo of a large system of small mammal burrows within the western portion of the study area.

Photograph 9. West facing photo of California buckwheat scrub where a southern California rufous-crowned sparrow was observed.

Photograph 10. East facing photo of a mature coast live oak tree within the study area.

Appendix C

Floral and Faunal Compendium

Plant Species Observed Within the Project site on May 5 and 28, 2021 and January 20, 2022

Scientific Name	Common Name	Origin
Acmispon glaber	deerweed	Native
Adenostoma fasciculatum	chamise	Native
Ailanthus altissima	tree of heaven	Introduced, Cal-IPC - Moderate
Ambrosia acanthicarpa	annual bur-sage	Native
Amsinckia menziesii	small-flowered fiddleneck	Native
Artemisia californica	California sagebrush	Native
Artemisia tridentata ssp. *parishii*	big sagebrush	Native
Arundo donax	giant reed	Introduced; Cal-IPC - High
Asclepias fascicularis	narrow-leaf milkweed	Native
Astragalus trichopes var. *phoxus*	Santa Barbara milk vetch	Native
Avena barbata	slender oat	Introduced; Cal-IPC - Moderate
Avena fatua	wild oat	Introduced; Cal-IPC - Moderate
Baccharis salicifolia	mule fat	Native
Bromus diandrus	ripgut brome	Introduced; Cal-IPC - Moderate
Bromus rubens	red brome	Introduced; Cal-IPC - High
Bromus tectorum	cheat grass	Introduced; Cal-IPC - High
Calystegia peirsonii	Peirson's morning glory	Native; CRPR 4.2
Centaurea melitensis	tocalote	Introduced; Cal-IPC - Moderate
Chenopodium album	lamb's quarters	Introduced
Clarkia purpurea	Purple clarkia	Native
Clarkia unguiculata	woodland clarkia	Native
Corethrogyne filaginifolia	California-aster	Native
Croton californicus	croton	Native
Croton setiger	turkey-mullein	Native
Cuscuta californica	chaparral dodder	Native
Datura wrightii	Jimson weed	Native
Deinandra fasciculata	tarplant	Native
Ericameria palmeri var. *pachylepis*	Palmer goldweed	Native
Erigeron canadensis	Canada horseweed	Native
Eriodictyon crassifolium	thick-leaved yerba santa	Native
Eriogonum angulosum	angled stem buckwheat	Native
Eriogonum elongatum var. *elongatum*	long-stem buckwheat	Native
Eriogonum cinereum	ashy leaf buckwheat	Native
Eriogonum fasciculatum	California buckwheat	Native
Eriophyllum confertiflorum	golden yarrow	Native
Erodium cicutarium	redstem filaree	Introduced; Cal-IPC - Limited
Erodium moschatum	filaree	Introduced
Eschscholzia minutiflora	pygmy poppy	Native
Eulobus californicus	California suncup	Native

Scientific Name	Common Name	Origin
Euphorbia albomarginata	rattlesnake sandmat	native
Heliotropum curassavicum var. *oculatum*	alkali heliotrope	Native
Hesperoyucaa whipplei	chaparral yucca	Native
Heterotheca grandiflora	telegraph weed	Native
Hirschfeldia incana	perennial mustard	Introduced; Cal-IPC - Moderate
Hordeum murinum ssp. *leporinum*	hare barley	Introduced; Cal-IPC - Moderate
Hypochaeris glabra	smooth cat's ear	Introduced
Isocoma menzeisii	coastal goldenbush	Native
Lactuca serriola	prickly lettuce	Introduced
Lamium amplexicaule	henbit	Introduced
Lasthenia gracilis	common goldfields	Native
Lepidospartum squamatum	scale-broom	Native
Logfia filaginoides	California cottonrose	Native
Logfia gallica	daggerleaf cottonrose	Introduced
Lupinus bicolor	miniature lupine	Native
Lupinus concinnus	bajada lupine	Native
Lupinus hirsutissimus	stinging lupine	Native
Lupinus truncatus	blunt leaf lupine	Native
Malacothrix glabrata	desert dandelion	Native
Malosma laurina	laurel sumac	Native
Malva parviflora	cheeseweed	Introduced
Marah macrocarpa	wild cucumber	Native
Marrubium vulgare	horehound	Introduced; Cal-IPC - Limited
Melia azedarach	China berry tree	Introduced
Mimulus aurantiacus	bush monkey flower	Native
Nicotiana glauca	tree tobacco	Introduced; Cal-IPC - Moderate
Pectocarya penicillata	winged pectocarya	Native
Phacelia sp.	phacelia	Native
Plagiobothrys canescens	grey popcorn flower	Native
Quercus agrifolia	coast live oak	Native
Quercus berberidifolia	scrub oak	Native
Quercus lobata	valley oak	Native
Ribes sp.	currant	Native
Rumex hymenosepalus	desert rhubarb	Native
Salvia mellifera	black sage	Native
Salix exigua	sandbar willow	Native
Sambucus nigra ssp. *caerulea*	blue elderberry	Native
Sisymbrium irio	London rocket	Introduced; Cal-IPC - Moderate
Solanum xanti	nightshade	Native
Stephanomaria virgata	rod wire lettuce	Native

Scientific Name	Common Name	Origin
Uropappus lindleyi	silverpuffs	Native
Urtica urens	dwarf nettle	Introduced
Verbena lasiostachys	common verbena	Native

Wildlife Species Observed Within the Project site on January 20, 2022

Scientific Name	Common Name	Status
Birds		
Accipiter cooperii	Cooper's hawk	Native; Watch List
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Native; Watch List; LA County Sensitive Bird Species Watch List
Baeolophus inornatus	oak titmouse	Native; LA County Sensitive Bird Species Watch List
Branta canadensis	Canada goose	Native
Buteo jamaicensis	red-tailed hawk	Native
Calypte anna	Anna's hummingbird	Native
Cathartes aura	turkey vulture	Native; LA County Sensitive Bird Species Part I List
Corvus brachyrhynchos	American crow	Native
Corvus corax	common raven	Native
Haemorhouse mexicanus	house finch	Native
Melospiza melodia	song sparrow	Native
Mimus polyglottos	northern mockingbird	Native
Passerculus sandwichensis	savannah sparrow	Native
Sayornis saya	Say's phoebe	Native
Sturnella neglecta	western meadowlark	Native; LA County Sensitive Bird Species Part I List
Sturnus vulgaris	European starling	Non-native
Toxostoma redivivum	California thrasher	Native
Troglodytes aedon	house wren	Native
Zonotrichia leucophrys	white-crowned sparrow	Native
Mammals		
Canis latrans	coyote (tracks)	Native
Odocoileus hemionus	mule deer (tracks)	Native
Otospermophilus beecheyi	California ground squirrel	Native
Sylvilagus audubonii	cottontail rabbit	Native

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Appendix D

Special-Status Species Evaluation Table

Special-Status Plant and Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Plants				
Arenaria paludicola marsh sandwort	FE/SCE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps, often within sandy openings. Elevations: 10-560ft (3-170m) Blooms May-Aug.	No Potential	Suitable marsh or swamp habitat is not present within the project site.
Berberis nevinii Nevin's barberry	FE/SCE G1/S1 1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub, riparian scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 230-2705ft. (70-825m.) Blooms (Feb)Mar-Jun.	Low Potential	Marginally suitable disturbed riparian and coastal scrub habitat present within the project site. However, this species was not detected during the 2021 and 2022 surveys.
Calochortus catalinae Catalina mariposa lily	None/None G3G4/S3S4 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. In heavy soils, open slopes, openings in brush. Elevations: 50-2295ft. (15-700m.) Blooms (Feb)Mar-Jun.	Low Potential	Marginally suitable habitat is present within slopes of wild oat and annual brome grassland and California buckwheat scrub. This species was detected in the regional vicinity of the project site in 2009. However, this species was not detected during the 2021 and 2022 surveys.
Calochortus clavatus var. *avius* Pleasant Valley mariposa-lily	None/None G4T2/S2 1B.2	Perennial bulbiferous herb. Lower montane coniferous forest. Josephine silt loam and volcanically derived soil; often in rocky areas. Elevations: 1000-5905ft. (305-1800m.) Blooms May-Jul.	No Potential	Suitable lower montane coniferous forest habitat and volcanically derived soils are absent from the project site.
Calochortus clavatus var. *clavatus* club-haired mariposa lily	None/None G4T3/S3 4.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Clay, Rocky, serpentinite (usually). Elevations: 100-4265ft. (30-1300m.) Blooms (Mar)May-Jun.	No Potential	Marginally suitable habitat is present within the big sagebrush scrub, California buckwheat scrub, and wild oats grassland. However, suitable clay and rocky soils are absent from the project site.
Calochortus clavatus var. *gracilis* slender mariposa-lily	None/None G4T2T3/S2S3 1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, valley and foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. Elevations: 1050-3280ft. (320-1000m.) Blooms Mar-Jun (Nov).	Low Potential	Marginally suitable habitat is present within slopes of wild oat and annual brome grassland and California buckwheat scrub within the project site. Numerous records are within the regional vicinity of project site. However, this species was not detected during the 2021 and 2022 surveys.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Calochortus fimbriatus late-flowered mariposa-lily	None/None G3/S3 1B.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, riparian woodland. Serpentinite (sometimes). Elevations: 900-6250ft. (275-1905m.) Blooms Jun-Aug.	No Potential	Suitable chaparral, cismontane woodland, and riparian woodland habitats are absent from the project site.
Calochortus palmeri var. *palmeri* Palmer's mariposa-lily	None/None G3T2/S2 1B.2	Perennial bulbiferous herb. Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. Elevations: 2330-7840ft. (710-2390m.) Blooms Apr-Jul.	No Potential	Suitable mesic habitat is not present within the project site. The nearest CNDDB record is approximately 3 miles north of the project site and was documented in 1989. However, this species was not detected during the 2021 and 2022 surveys.
Calochortus plummerae Plummer's mariposa-lily	None/None G4/S4 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Granitic, rocky. Elevations: 330-5580ft. (100-1700m.) Blooms May-Jul.	Low Potential	Marginally suitable habitat is present within slopes of wild oat and annual brome grassland and California buckwheat scrub. Numerous records are within the regional vicinity of project site. However, this species was not detected during the 2021 and 2022 surveys.
Calystegia peirsonii Peirson's morning-glory	None/None G4/S4 4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Often in disturbed areas or along roadsides or in grassy, open areas. Elevations: 100-4920ft. (30-1500m.) Blooms Apr-Jun.	Present	One individual was observed within the wild oat and annual brome grassland within the northern slope of the project site during the Rare Plant Survey in 2021.
Canbya candida white pygmy-poppy	None/None G3G4/S3S4 4.2	Annual herb. Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Granitic, gravelly, sandy. Elevations: 1970-4790ft. (600-1460m.) Blooms Mar-Jun.	No Potential	The project site is outside the known elevation range of this species.
Cercocarpus betuloides var. *blancheae* island mountain-mahogany	None/None G5T4/S4 4.3	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest. Elevations: 100-1970ft. (30-600m.) Blooms Feb-May.	No Potential	Suitable chaparral and closed-cone coniferous forest habitats are absent from the project site.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	None/SCE G2T1/S1 1B.1	Annual herb. Coastal scrub, valley and foothill grassland. Sandy soils. Elevations: 490-4005ft. (150-1220m.) Blooms Apr-Jul.	Low Potential	Marginally suitable habitat is present within the big sagebrush scrub. However, this species was not detected during the 2021 and 2022 surveys.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Chorizanthe parryi var. *parryi* Parry's spineflower	None/None G3T2/S2 1B.1	Annual herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings, Rocky (sometimes), sandy (sometimes). Elevations: 900-4005ft. (275-1220m.) Blooms Apr-Jun.	Low Potential	Marginally suitable habitat is present within the big sagebrush scrub, California buckwheat scrub, and wild oats grassland. However, this species was not detected during the 2021 and 2022 surveys.
Deinandra minthornii Santa Susana tarplant	None/SCR G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. Elevations: 920-2495ft. (280-760m.) Blooms Jul-Nov.	No Potential	Suitable sandstone outcrops and crevices within shrubland habitat are absent from the project site.
Deinandra paniculata paniculate tarplant	None/None G4/S4 4.2	Annual herb. Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in vernal pools or on mima mounds near them. Elevations: 80-3085ft. (25-940m.) Blooms (Mar)Apr-Nov.	No Potential	Suitable vernally mesic sites are absent from the project site.
Delphinium parryi ssp. *purpureum* Mt. Pinos larkspur	None/None G4T4/S4 4.3	Perennial herb. Chaparral, mojavean desert scrub, pinyon and juniper woodland. Elevations: 3280-8530ft. (1000-2600m.) Blooms May-Jun.	No Potential	The project site is outside the known elevation range of this species.
Dodecahema leptoceras slender-horned spineflower	FE/SCE G1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, coastal scrub. Flood deposited terraces and washes; associates include *Encelia, Dalea, Lepidospartum*, etc. Sandy soils. Elevations: 655-2495ft. (200-760m.) Blooms Apr-Jun.	Low Potential	Marginally suitable habitat is present within big sagebrush scrub. However, this species was not detected during the 2021 and 2022 surveys.
Dudleya densiflora San Gabriel Mountains dudleya	None/None G2/S2 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. In crevices and on decomposed granite on cliffs and canyon walls. Elevations: 800-2000ft. (244-610m.) Blooms Mar-Jul.	No Potential	Suitable crevices and decomposed granite of cliffs and canyon walls are absent from the project site.
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. Elevations: 65-3135ft. (20-955m.) Blooms Mar-May.	Low Potential	Marginally suitable habitat is present within chamise-California buckwheat scrub However, this species was not detected during the 2021 and 2022 surveys.
Helianthus inexpectatus Newhall sunflower	None/None G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps, riparian woodland. Freshwater marshes, and seeps. Elevations: 1000-1000ft (305-305m). Blooms Aug-Oct.	No Potential	Suitable marsh, swamp, and riparian woodland habitats are absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Hordeum intercedens vernal barley	None/None G3G4/S3S4 3.2	Annual herb. Coastal dunes, coastal scrub, valley and foothill grassland, vernal pools. Vernal pools, dry, saline streambeds, alkaline flats. 5-. Elevations: 15-3280ft. (5-1000m.) Blooms Mar-Jun.	No Potential	Suitable vernal pools and saline streambeds are absent from the project site.
Horkelia cuneata var. *puberula* mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660ft. (70-810m.) Blooms Feb-Jul (Sep).	Low Potential	Marginally suitable habitat is present within the big sagebrush and California buckwheat scrub. However, the only record of this species within the regional vicinity of the project site is possibly extirpated and was recorded in 1929. In addition, this species was not detected during the 2021 and 2022 surveys.
Juglans californica Southern California black walnut	None/None G4/S4 4.2	Perennial deciduous tree. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Slopes, canyons, alluvial habitats. Elevations: 165-2955ft. (50-900m.) Blooms Mar-Aug.	No Potential	Marginally suitable habitat is present within the big sagebrush and California buckwheat scrub. However, this species was not detected during the 2021 and 2022 surveys.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Perennial rhizomatous herb. Coastal dunes, marshes and swamps, meadows and seeps. Moist saline places. Elevations: 10-2955ft. (3-900m.) Blooms (Mar)May-Jun.	No Potential	Suitable dune, marsh, swamp, meadow, and seep habitats are absent from the project site.
Lepechinia fragrans fragrant pitcher sage	None/None G3/S3 4.2	Perennial shrub. Chaparral. Elevations: 65-4300ft. (20-1310m.) Blooms Mar-Oct.	Low Potential	Marginally suitable habitat is present within chamise-California sagebrush scrub However, this species was not detected during the 2021 and 2022 surveys.
Lepechinia rossii Ross' pitcher sage	None/None G1/S1 1B.2	Perennial shrub. Chaparral. Soil derived from fine-grained, reddish sedimentary rock. Elevations: 1000-2590ft. (305-790m.) Blooms May-Sep.	No Potential	Suitable soils derived from fine-grained, reddish sedimentary rock are absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None G5T3/S3 4.3	Annual herb. Chaparral, coastal scrub. Dry soils, shrubland. 4-. Elevations: 5-2905ft. (1-885m.) Blooms Jan-Jul.	Low Potential	Marginally suitable habitat is present within the big sagebrush and California buckwheat scrub. However, the only record of this species within the regional vicinity of the project site was recorded in 1917. In addition, this species was not detected during the 2021 and 2022 surveys.
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lily	None/None G4T4?/S4? 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Yellow-pine forest or openings, oak canyons. Elevations: 100-5905ft. (30-1800m.) Blooms Mar-Jul (Aug).	No Potential	Suitable yellow-pine forest or oak canyon habitats are absent from the project site.
Lupinus paynei Payne's bush lupine	None/None G1Q/S1 1B.1	Perennial shrub. Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. Elevations: 720-1380ft. (220-420m.) Blooms Mar-Apr (May-Jul).	Low Potential	Marginally suitable habitat is present within the big sagebrush and California buckwheat scrub. However, this species was not detected during the 2021 and 2022 surveys.
Malacothamnus davidsonii Davidson's bush-mallow	None/None G2/S2 1B.2	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy washes. Elevations: 605-3740ft. (185-1140m.) Blooms Jun-Jan.	Low Potential	Marginally suitable habitat is present within the big sagebrush, California buckwheat scrub, and Placerita Creek streambed. There are multiple recorded occurrences within the regional vicinity of the project site. However, this species was not detected during the 2021 and 2022 surveys.
Nasturtium gambelii Gambel's watercress	FE/SCT G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevations: 15-1085ft. (5-330m.) Blooms Apr-Oct.	No Potential	Suitable marsh or swamp habitat is not present within the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1	Annual herb. Chenopod scrub, marshes and swamps, playas, vernal pools. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. Elevations: 100-2150ft. (30-655m.) Blooms Apr-Jun.	No Potential	Suitable mesic habitat is not present within project site. In addition, this species was not detected during the 2021 and 2022 surveys.
Navarretia ojaiensis Ojai navarretia	None/None G2/S2 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Elevations: 900-2035ft. (275-620m.) Blooms May-Jul.	Low Potential	Marginally suitable habitat is present in the chaparral and scrub habitats within the project site. However, the closest known occurrence is approximately 9 miles west of the project site, and the species was not detected during the 2021 and 2022 surveys.
Navarretia setiloba Piute Mountains navarretia	None/None G2/S2 1B.1	Annual herb. Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Red clay soils, or on gravelly loam. Elevations: 935-6890ft. (285-2100m.) Blooms Apr-Jul.	Low Potential	Marginally suitable habitat is present within the wild oat and annual brome grasslands. However, this species was not detected during the 2021 and 2022 surveys.
Opuntia basilaris var. *brachyclada* short-joint beavertail	None/None G5T3/S3 1B.2	Perennial stem. Chaparral, Joshua tree woodland, mojavean desert scrub, pinyon and juniper woodland. Sandy soil or coarse, granitic loam. Elevations: 1395-5905ft. (425-1800m.) Blooms Apr-Jun (Aug).	Low Potential	Marginally suitable habitat is present within the California buckwheat scrub. However, this species was not detected during the 2021 and 2022 surveys.
Orcuttia californica California Orcutt grass	FE/SCE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 50-2165 ft (15-660m). Blooms Apr-Aug.	No Potential	Suitable vernal pool habitat is not present within project site. In addition, this species was not detected during the 2021 and 2022 surveys.
Phacelia mohavensis Mojave phacelia	None/None G4Q/S4 4.3	Annual herb. Cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. Sandy or gravelly soils, dry streambeds. Elevations: 4595-8205 ft. (1400-2500m). Blooms Apr-Aug.	No Potential	The project site is outside the known elevation range of this species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Pseudognaphalium leucocephalum white rabbit-tobacco	None/None G4/S2 2B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy, gravelly sites. Elevations: 0-6890ft. (0-2100m.) Blooms (Jul)Aug-Nov (Dec).	Low Potential	Marginally suitable habitat is present within the big sagebrush, California buckwheat scrub, and Placerita Creek streambed. There are multiple recorded occurrences within the regional vicinity of the project site. However, this species was not detected during the 2021 and 2022 surveys.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr (May).	Low Potential	Marginally suitable habitat is present within the California buckwheat scrub. However, the only CNDDB record in the regional vicinity was recorded in 1901. In addition, this species was not detected during the 2021 and 2022 surveys.
Streptanthus campestris southern jewelflower	None/None G3/S3 1B.3	Perennial herb. Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. Elevations: 2955-7545ft. (900-2300m.) Blooms (Apr) May-Jul.	No Potential	The project site is outside the known elevation range of this species.
Symphyotrichum greatae Greata's aster	None/None G2/S2 1B.3	Perennial rhizomatous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Mesic canyons. Elevations: 985-6595ft. (300-2010m.) Blooms Jun-Oct.	No Potential	Suitable mesic canyons are absent from the project site.
Animals				
Invertebrates				
Branchinecta lynchi vernal pool fairy shrimp	FT/None G3/S3	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.	No Potential	Suitable vernal pool habitat is absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Danaus plexippus pop. 1 monarch - California overwintering population	FC/None G4T2T3/S2S3	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.	No Potential	Suitable wind-protected tree groves comprised of Eucalyptus, Monterey pine, and cypress are absent from the project site.
Euphydryas editha quino quino checkerspot butterfly	FE/None G5T1T2/S1S2	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*.	No Potential	The project site is outside the known range of the species and suitable food plants are absent from the project site.
Streptocephalus Woottoni Riverside fairy shrimp	FE/None G1G2/S1S2	Limited to fairly deep, and moderate in size, pools that support a longer ponding duration. Restricted to a subset of vernal pools and vernal pool complexes in southern California (Ventura, Orange, Riverside, and San Diego Counties) and in northern Mexico.	No Potential	Suitable vernal pool habitat is absent from the project site.
Fish				
Catostomus santaanae Santa Ana sucker	FT/None G1/S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE/SE G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Gila orcuttii arroyo chub	None/None G2/S2 SSC	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.	No Potential	Suitable permanent aquatic habitat is absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Rhinichthys osculus ssp. *8* Santa Ana speckled dace	None/None G5T1/S1 SSC	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.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Amphibians				
Anaxyrus californicus arroyo toad	FE/None G2G3/S2S3 SSC	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.	Low Potential	Marginally suitable intermittent stream habitat is present within the project site. However, willow, cottonwood, and sycamore trees are absent from the project site. In addition, the recorded occurrences within the regional vicinity of the project site are over 20 years old.
Rana boylii foothill yellow-legged frog	None/SE G3/S3 SSC	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. Needs at least 15 weeks to attain metamorphosis.	No Potential	Suitable relatively permanent aquatic habitat is absent from the project site.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	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.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Rana muscosa southern mountain yellow-legged frog	FE/SE G1/S1 WL	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mountains (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 years to complete their aquatic development.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Spea hammondii western spadefoot	None/None G2G3/S3 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Low Potential	Marginally suitable habitat is present in the wild oat and annual brome grasslands within the project site. However, vernal pools are absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Taricha torosa Coast Range newt	None/None G4/S4 SSC	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.	Low Potential	Marginally suitable habitat is present in the wild oat and annual brome grasslands within the project site. Breeding habitat is absent from the project site.
Reptiles				
Anniella spp. California legless lizard	None/None G3G4/S3S4 SSC	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.	High Potential	Suitable open habitats including big sagebrush scrub, wild oat and annual brome grasslands, California buckwheat scrub, chamise-California buckwheat scrub, and scale broom scrub are present within the project site. Moist, loose soils are present within Placerita Creek.
Arizona elegans occidentalis California glossy snake	None/None G5T2/S2 SSC	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.	Low Potential	Suitable scrub and grassland habitats including big sagebrush scrub, wild oat and annual brome grasslands, California buckwheat scrub, and chamise-California buckwheat scrub are present within the project site. Loose, sandy soils are present within Placerita Creek. However, the most recent recorded CNDDB occurrence is over 60 years old.
Aspidoscelis tigris stejnegeri coastal whiptail	None/None G5T5/S3 SSC	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.	High Potential	Suitable open habitats including big sagebrush scrub, wild oat and annual brome grasslands, California buckwheat scrub, chamise-California buckwheat scrub, and scale broom scrub are present within the project site. Sandy soils are present within Placerita Creek.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No Potential	Suitable permanent aquatic habitat is absent from within the project site as well as within 0.5 kilometers.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Phrynosoma blainvillii coast horned lizard	None/None G3G4/S3S4 SSC	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.	High Potential	Suitable open habitats including big sagebrush scrub, wild oat and annual brome grasslands, California buckwheat scrub, chamise-California buckwheat scrub, and scale broom scrub are present within the project site. Sandy soils are present within Placerita Creek.
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	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.	No Potential	Suitable permanent aquatic habitat is absent from the project site.
Birds				
Accipiter cooperii Cooper's hawk	None/None G5/S4 WL	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.	Present	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.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Present	Multiple individuals were observed within the project site during the January 2022 reconnaissance survey.
Ammodramus savannarum grasshopper sparrow	None/None G5/S3 SSC	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.	Low Potential	Marginally suitable habitat is present on the slopes dominated by wild oat and annual brome grassland within the project site. The one record of this species documented within five miles of the project in 2005 is likely accidental as this species generally does not occur in LA County (Michael Baker International pers. comm.)
Artemisiospiza belli Bell's sage sparrow	None/None G5T2T3/S3 WL	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.	High Potential	Suitable habitat is present within the chamise-California buckwheat scrub. In addition, there are multiple, recent CNDDB occurrences in the regional vicinity of the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Athene cunicularia burrowing owl	None/None G4/S3 SSC	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.	No Potential	Suitable open habitat is present within the wild oat and annual brome grassland. Numerous California ground squirrel burrows were observed within the project site; however, none of the burrows exhibited sign of burrowing owl (i.e., whitewash, pellets, feathers) during focused burrowing owl surveys conducted in 2022 (Rincon 2022b).
Buteo swainsoni Swainson's hawk	None/ST G5/S3	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.	Low Potential	Suitable foraging habitat is present within the project site. However, nesting habitat is absent and the CNDDB occurrences within the regional vicinity of the project site are over 100 years old and extirpated.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT/SE G5T2T3/S1	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.	No Potential	Suitable riparian jungles consisting of willow, cottonwoods, blackberry, nettle, and/or wild grape are absent from the project site.
Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	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.	Low Potential	Suitable foraging habitat is present within the wild oat and annual brome grasslands. However, suitable nesting habitat is absent from the project site.
Empidonax traillii extimus southwestern willow flycatcher	FE/SE G5/S2S3 SSC	Requires dense willow thickets for nesting and roosting. Uses low, exposed willow branches for singing posts and hunting perches.	No Potential	Suitable riparian habitat is absent from the project site.
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	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.	Moderate Potential	Suitable habitat is present within the non-native grasslands at the project site. The nearest CNDDB occurrence is approximately five miles northwest of the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Falco mexicanus prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Low Potential	Suitable foraging habitat is present within the project site. However, nesting habitat is absent and the only CNDDB occurrence within the regional vicinity of the project site is over 40 years old.
Gymnogyps californianus California condor	FE/SE G1/S1 FP	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.	Low Potential	Suitable foraging habitat is present within the project site. However, nesting habitat is absent. This species may forage irregularly in the parcel, although the potential for this species to occur is low due to the lack of nesting habitat in nearby areas (i.e., site is surrounded by commercial and residential development).
Icteria virens yellow-breasted chat	None/None G5/S3 SSC	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.	No Potential	Suitable riparian thickets of willow, blackberry, and wild grape are absent from the project site.
Lanius ludovicianus loggerhead shrike	None/None G4/S4 SSC	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.	High Potential	Suitable scrub habitats including big sagebrush scrub, California buckwheat scrub, and chamise-California buckwheat scrub are present within the project site.
Polioptila californica coastal California gnatcatcher	FT/None G4G5T3Q/S2 SSC	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.	No Potential	Moderately suitable coastal sage scrub habitat is present within the project site. No coastal California gnatcatchers were detected during protocol-level surveys conducted in 2022 (Rincon 2022c).
Riparia bank swallow	None/ST G5/S2	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.	No Potential	Vertical banks and cliffs are absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Setophaga petechia yellow warbler	None/None G5/S3S4 SSC	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.	Present	Suitable riparian thickets of willow, cottonwoods, sycamores, ash, and alders for nesting are absent from the project site. However, this species a migrating individual of this species was incidentally observed foraging at the project site near Placerita Creek during a site walk in April 2022.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	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.	No Potential	Suitable riparian habitat is absent from the project site.
Mammals				
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No Potential	Suitable roosting habitats including rock outcrops, caves, mine tunnels, buildings, bridges, and tree hollows are absent from the project site.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls and ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	No Potential	Suitable roosting habitats including caves, lava tubes, buildings, and bridges are absent from the project site.
Euderma maculatum spotted bat	None/None G4/S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Typically forages in open terrain, over water and along washes. Feeds almost entirely on moths. Roosts in rock crevices in cliffs or caves. Occasionally roosts in buildings.	No Potential	Suitable aquatic habitat and roosting habitat, including rock crevices and buildings, are absent from the project site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations
Eumops perotis californicus western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	No Potential	Suitable roosting habitats including cliff faces, caves, and buildings are absent from the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	None/None G5T3T4/S3S4 SSC	Occurs in Los Angeles, San Bernardino, Riverside, and San Diego Counties of southern California. Typically found in open shrub habitats. Will also occur in woodland habitats with open understory adjacent to shrublands.	Moderate Potential	Suitable open shrub habitats are present within big sagebrush and California buckwheat habitats. The nearest CNDDB record was recorded in 2005 and is approximately 6.2 miles northwest of the project site.
Macrotus californicus California leaf-nosed bat	None/None G3G4/S3 SSC	Occurs in desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats. Needs rocky, rugged terrain with abandoned mines or caves for roosting.	No Potential	Suitable roosting habitats including caves, and mines, are absent from the project site.
Neotoma lepida intermedia San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.	Low Potential	Marginally suitable scrub habitat is present within the project site. However, the CNDDB records within the regional vicinity of the project site are 30 years old.
Onychomys torridus ramona southern grasshopper mouse	None/None G5T3/S3 SSC	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.	Low Potential	Marginally suitable scrub habitat is present within the project site. However, the only CNDDB record within the regional vicinity of the project site is over 90 years old.
Taxidea taxus American badger	None/None G5/S3 SSC	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.	Low Potential	Moderately suitable open, scrub habitat is present within the sagebrush scrub, California buckwheat scrub, and chamise-California buckwheat scrub. However, no suitable burrows or diagnostic sign of the species was observed within the project site (i.e., claw marks at burrow entrances).

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/Observations

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCR = State Candidate Rare
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)

1B = Rare, Threatened, or Endangered in California and elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

Appendix E

Jurisdictional Delineation Report

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

July 12, 2021
Project No: 21-11189

Jeff Weber
Blackhall Studios
1415 Constitution Road SE
Atlanta, Georgia 30316
Via email: jeff@JWeberGroup.com

Subject: **Blackhall Property 2021 Jurisdictional Waters and Wetlands Delineation**
Santa Clarita, California

Dear Mr. Weber:

This letter report has been prepared by Rincon Consultants, Inc. (Rincon) to provide Blackhall Studios (Blackhall) with an assessment of aquatic resources within the subject property. The delineation was conducted to determine the location and extent of waters and wetlands within the assessor parcel number (APN) 2834-001-014 that are potentially subject to the jurisdiction of the regulatory authority of water resource agencies, including the United States Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW).

Any proposed activities to be conducted in areas identified as jurisdictional waters and/or wetlands may be subject to the permit requirements of the USACE, under Section 404 of the Clean Water Act (CWA), RWQCB, under Section 401 of the CWA and Porter-Cologne Water Quality Act, and a Streambed Alteration Agreement from the CDFW pursuant to Section 1600 et. seq. of the California Fish and Game Code. The state and federal authorities will review the data and jurisdictional limits provided in this report and make a final determination regarding jurisdiction at the time that permits are requested.

Site Location and Description

The subject parcel includes an approximately 92-acre undeveloped site in the City of Santa Clarita, California (Attachment A; Figure 1). The site is situated in an urbanized area in the southern portion of Santa Clarita. Adjacent land uses include residential developments to the north and east as well as commercial and industrial developments to the south and west. The Newhall Metrolink right-of-way (ROW) is located along the site's western boundary parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east. The study area analyzed in this report includes the subject parcel (APN 2834-001-014) and the Metropolitan Water District property to the east.

Environmental Setting

The study area overall is highly disturbed and non-native vegetation is dominant. The study area has been subject to past and ongoing disturbances including roads, unauthorized off-road vehicle (ORV) use,

foot and bicycle traffic, homeless encampments, and trash and debris dumping. The southern portion of the study area contains paved roads and an open field that is generally level and appears to be regularly mowed.

Placerita Creek intersects the study area, consisting of a wide alluvial riverbed that supports seasonal stream flows from east to west. Native shrubs are dominant, yet sparse, in the Placerita Creek corridor, while the understory is either unvegetated or consists primarily of non-native grasses and herbs. Two additional unnamed drainage features enter the site within the southern extent of the study area, receiving urban runoff from off-site. These two drainage features run from south to north and converge to form a single channel that conveys water through an existing culvert under Railroad Avenue. Eventually, flows from the unnamed drainages connect to Placerita Creek, off-site. Within the study area, these features do not support any riparian or other hydrophytic vegetation, and are dominated by non-native grasses.

With the exception of the hillslopes in the northern portion, the study area is generally level. Elevation ranges between approximately 1,210 and 1,320 feet above mean sea level (msl). In the northern portion of the study area, the terrain slopes from the tops of low hills downward to the southwest toward Placerita Creek; in the southern and central portions, the site gently slopes downward from the southeast to the northwest toward Placerita Creek.

Methodology

This study included a literature review and desktop evaluation of existing aerial imagery and published datasets, followed by an on-site field delineation. The study area was defined as the entire parcel in addition to the Metropolitan Water District parcel to the east, illustrated in Figure 2 (Attachment A). The jurisdictional delineation has been prepared in accordance with USACE, RWQCB and CDFW procedures.
Literature Review

Prior to the field survey, potential locations of aquatic resources were determined through review of available literature, mapping, and aerial imagery. Specifically, aerial imagery (Google Earth 2021), and regional and site-specific topographic maps (*White Ledge Peak*, California USGS 7.5-minute topographic quadrangle) were analyzed to identify mapped streams, differences in vegetative cover, and the presence of breaks in slope that may be associated with the active floodplain/low terrace boundary. The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS 2021) and the National Hydrography Dataset (USGS 2021) were reviewed to determine if any wetlands or flow paths were mapped on or in the vicinity of the study area. The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) the Web Soil Survey (USDA NRCS 2021a) and National Hydric Soils List (USDA 2021b) were also reviewed to determine if any soil types mapped on or in the vicinity of the study area were classified as hydric. In addition, a previous jurisdictional delineation that was completed on the property in 2015 was reviewed (Rincon 2015). A field survey was completed on April 22, 2015 and included the 92-acre parcel and a 100-foot buffer.

Field Survey

Rincon Biologists Thea Benson and Malek Al-Marayati conducted a jurisdictional delineation field survey within the study area on June 10, 2021. All potentially jurisdictional features within the study area were inspected to record existing conditions and determine jurisdictional limits. Current federal and state methods and guidelines were used to identify and delineate aquatic features, as described below.

Non-Wetland Waters of the United States

The lateral limits of USACE jurisdiction (i.e., width) for non-wetland waters were determined by the presence of physical characteristics indicative of the OHWM. The OHWM was identified in accordance with the applicable Code of Federal Regulations (CFR) sections (33 CFR 328.3 and 33 CFR 328.4) and Regulatory Guidance Letter 05-05 (USACE 2005), as well as in reference to various relevant technical publications, including, but not limited to: *Review of Ordinary High Water Mark Indicators for Delineating Arid Streams in the Southwestern United States* (USACE 2004), *Distribution of Ordinary High Water Mark (OHWM) Indicators and Their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels (*USACE 2006*),* and *A Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the United States* (USACE 2008b). The regulations were also reviewed in the determination of non-jurisdictional features including ephemeral drainages, artificially irrigated areas and roadway ditches excavated in uplands.

Additionally, Rincon evaluated sources of water, potential connections and distances to Traditional Navigable Waters (TNWs), streams that are perennial or intermittent in nature and other factors that affect whether waters qualify as "waters of the U.S." under the current 2020 Navigable Water Protection Rule. A more detailed regulatory definition of USACE jurisdiction can be found in Attachment B.

Wetland Waters of the United States

Potential wetland features were evaluated for presence of wetland indicators; specifically, hydrophytic vegetation, hydric soils, and wetland hydrology, according to routine delineation procedures within the *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a). The USACE *Arid West 2018 Regional Wetland Plant List* was used to determine the wetland status of the examined vegetation by the following indicator status categories: Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), and Obligate Wetland (OBL) (Lichvar et al. 2018). Representative sample points were sited in aeras most likely to exhibit wetland characteristics, i.e., a prevalence of hydrophytic vegetation and suitable landform, and examined in the field for potential wetland indicators. Sample points were not conducted in areas with an obvious prevalence of upland vegetation or in areas where the landform would not support wetland features, i.e. concrete channels and sloped areas. A more detailed regulatory definition of USACE jurisdiction can be found in Attachment B.

Waters of the State

The limits of "waters of the State," as defined under the Porter-Cologne Water Quality Control Act, are any surface water or groundwater, including saline waters, within the boundaries of the state. In those areas where a OHWM was present, the OHWM was determined to represent the limits of waters of the State based on current interpretation of jurisdiction by the Los Angeles RWQCB. In those areas where an OHWM was not present, but surface water was present, i.e. roadside ditches that are hydrologically connected to tributaries and TNWs, the limits of waters of the State were determined to be bounded by the top of slope or top of "bank."

Potential State wetland features were evaluated pursuant to the State Water Resources Control Board's (SWRCB) *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). Potential state wetlands were evaluated following the SWRCB's definition, which relies on the same three parameters as the USACE definition (hydrophytic vegetation, wetland

hydrology, and hydric soils) but allows for naturally unvegetated areas meeting the other two parameters to be considered wetlands. A more detailed regulatory definition of RWQCB jurisdiction can be found in Attachment B.

CDFW Streambeds

The extent of potential streambeds, streambanks, lakes and riparian habitat subject to CDFW jurisdiction under Sections 1600 *et seq*. of the California Fish and Game Code was delineated by reviewing the topography and morphology of potentially jurisdictional features to determine the outer limit of riparian vegetation, where present, or the tops of banks for stream features. A more detailed regulatory definition of CDFW jurisdiction can be found in Attachment B.

Data Collection and Processing

Extents of potential jurisdictional features and sample points were mapped using a Geode GPS unit with sub-meter accuracy and recent aerial photography (Bing 2021) in ArcCollector. The data were subsequently transferred to Rincon's geographic information system (GIS) to produce all figures, provided in Attachment A. Representative photographs of the study area are presented in Attachment C and completed data sheets are provided in Attachment D.

Delineation Results

A description of the major vegetation units observed, soil types encountered, and a discussion of local hydrology in the study area are presented below.

Vegetation and Land Cover Types

Please refer to Figure 3, Attachment A, for mapped vegetation communities and land cover types.

Wild Oat Grassland (*Avena* spp. Herbaceous Semi-Natural Alliance)

Wild oat grasslands are found in all topographic settings in foothills, waste places, rangelands, and openings in woodlands between 0-7,215 feet (0-2,200 meters) in elevation. Wild oats (*Avena barbata*, *A. fatua*) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover. This vegetation community is not considered sensitive (CDFW 2020).

This vegetation community covers the majority of the site and occurs in a large open, flat area and the lower portion of the hills within the central portion of the site. The herbaceous layer is dominated by wild oat, ripgut brome (*Bromus diandrus*), rattail fescue (*Festuca myuros*), and cheat grass (*Bromus tectorum*). Non-native forbs such as perennial mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), horehound (*Marrubium vulgare*), and tocalote (*Centaurea melitensis*) were also commonly observed within this community. This community exhibits evidence of regular human disturbance, as it is traversed by several actively used dirt roads and trails, and supports a homogenous, predominantly nonnative plant species composition and low habitat complexity.

California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)

California buckwheat scrub is typically found along upland sloped, intermittently flooded arroyos, channels and washes, and rarely within flooded low-gradient deposits, between 0-3,940 feet (0-1,200

meters) in elevation. Soils are typically course, well drained, and moderately acidic to slightly saline. California buckwheat (*Eriogonum fasciculatum*) contributes to at least 50 percent relative cover in the shrub layer. This vegetation community is not considered sensitive (CDFW 2020).

This vegetation community is found along the western border of the study area. California buckwheat is dominant in the open shrub layer, with California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*) present as subdominant species. The herbaceous layer is dominated by wild oats, black mustard, and cheatgrass.

Chamise-California Buckwheat Scrub (*Adenostoma fasciculata-Eriogonum fasciculatum* Shrubland Association)

Chamise-California buckwheat scrub is found within varied topography, typically within shallow soils over colluvium and many kinds of bedrock, between 30-5,900 feet (10-1,800 meters) in elevation. Chamise (*Adenostoma fasciculata*) and California buckwheat comprise at least 50 percent cover in the shrub layer. This vegetation community is not considered sensitive (CDFW 2020).

This vegetation community is found within the northeastern portion of the study area, on the northeastern-facing slope of a hill. Chamise is dominant in the dense shrub layer, with California buckwheat present as a subdominant species. The herbaceous layer is sparse due to the density of the shrub layer. Commonly encountered herbaceous species include miniature lupine (*Lupinus bicolor*), woodland clarkia (*Clarkia unguiculata*), wishbone bush (*Mirabilis bigelovii*), and death camas (*Toxicoscordion fremontii*).

Big Sagebrush Scrub (*Artemisia tridentata* Shrubland Alliance)

Big sagebrush scrub is typically found within plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, hills, ridges, seasonal and perennial stream channels, and dry washes between 984-9,840 feet (30-3,000 meters) in elevation. Big sagebrush (*Artemisia tridentata*) constitutes at least 2 percent absolute cover in the shrub layer, with no other single species with greater cover. This vegetation community is not considered sensitive (CDFW 2020).

This vegetation community is found within the bed and upper banks of Placerita Creek, within the southern portion of the study area. Soils consist of coarse sand. Big sagebrush (*Artemisia tridentata*) is dominant in the open shrub layer, with thickleaf yerba santa (*Eriodictyon crassifolium*), California buckwheat, California sagebrush, and scale broom (*Lepidospartum squamatum*) are commonly present. The herbaceous layer is sparse and dominated by black mustard. This community intergrades with riverwash along the southern boundary of the study area and wild oats annual grassland to the north.

Giant Reed Break (*Arundo donax* Semi-Natural Alliance)

This herbaceous semi-natural alliance is found within riparian areas, along low-gradient streams and ditches, as well as within semi-permanently flooded and slightly brackish marshes and impoundments, from 0-1,600 meters in elevation. Giant reed (*Arundo donax*) dominates the herbaceous layer. Giant reed is provided a rating of high by the California Invasive Plant Council (Cal-IPC 2021), indicating that the species has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Its reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. This vegetation community is not considered sensitive (CDFW 2020).

This vegetation community is found within Placerita Creek within the southwestern portion of the study area, adjacent to big sagebrush scrub and wild oat grassland. The dominant species is giant reed, which forms a dense herbaceous layer to the exclusion of all other species.

Riverwash

This community is located within an open, unvegetated or sparsely vegetated channel of Placerita Creek that is maintained by scouring from intermittent stream flows. The substrate is comprised of gravel, cobble, sand, and scattered woody debris in the main channel, with finer silty soils and sparse annual grass and shrub cover on lower terraces. Commonly encountered plant species include native shrubs such as mulefat (*Artemisia douglasii*) and Palmer's goldenbush (*Ericameria palmeri* var*. pachylepis*), as well as a variety of herbaceous species, such as annual burweed (*Ambrosia acanthicarpa*) and telegraph weed (*Heterotheca grandiflora*), and tree tobacco (*Nicotiana glauca*) and tree of heaven (*Ailanthus altissima*); however, these species appear to be temporary inhabitants that do not persist for long periods due to annual flooding episodes. Riverwash is a naturally dynamic habitat and may shift and change position within drainages, depending on flood volumes and regularity.

Soils

Information about the soil types present within the study area was obtained from the NRCS Online Web Soil Survey (USDA NRCS 2021). Based on data from the soil survey, six soil map units underlie the study area (Attachment A, Figure 4). Overall soil characteristics onsite maydiffer from these mapped soil types due to past and ongoing surface disturbances.

Hanford sandy loam, 0 to 2 percent slopes (HcA)

The Hanford series, mapped in disturbed wild oat grasslands within the southern half of the study area, consists of very deep, well-drained soils typically located on stream bottoms and is formed in sandy alluvium from dominantly granitic alluvium; the soil profile is described as having a fine sandy loam texture.

Metz loamy sand, 0 to 2 percent slopes (MfA)

The Metz series, mapped just south of Placerita Creek, consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. This series consists of fine sandy loams and typically occurs on floodplains and alluvial fans.

Riverwash (Rg)

Riverwash soils occur within the Placerita Creek channel. This soil type is typically sandy, gravelly, or cobbly, it is somewhat poorly drained and experiences frequent flooding. Riverwash is listed as a hydric soil on the NRCS Hydric Soils List for the Antelope Valley Area (USDA, NRCS 2021b).

Sorrento loam, 0 to 2 percent slopes (SsA)

The Sorrento series, mapped along the northern portion of Placerita Creek and disturbed wild oat grasslands north of the creek, consists of very deep, well drained, moderately alkaline soils that formed in medium textured alluvium, mostly from sedimentary formations. Sorrento soils occur on alluvial fans and stabilized floodplains and have a fine-loamy texture.

Ojai loam, 2 to 9 percent slopes (OgC) and 30 to 50 percent slopes (OgF)

Soils on the northern slopes and southern tip of the study area are mapped as the Ojai series, which consists of well drained loamy soils that are formed in alluvium derived from sedimentary rock and occur on terraces.

Hydrology

The study area is located in the Santa Clara River Watershed (SCRW), within the South Coast Hydrologic Unit (Hydrologic Unit Code [HUC] 8), which encompasses approximately 1,629 square miles in Los Angeles and Ventura counties. The river originates in the northern slopes of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean between the cities of San Buenaventura and Oxnard. Significant tributaries within the watershed include the Piru, Sespe, Santa Paula, Hopper, Pole, and Castaic Creeks; San Francisquito and Bouquet Canyon; and South Fork Santa Clara River. Hydrology of the river is highly variable, and flow varies seasonally.

Within the greater SCRW, the study area occurs within the Upper Santa Clara River Watershed (USCRW) within Santa Clara River Reach 5 (HUC 180701020403). More specifically, the study area is located in the South Fork Santa Clara River subwatershed (SFSCRS) (HUC 180701020401). The USCRW comprises a total area of approximately 262,400 acres and the SFSCRS comprises an area of approximately 28,785 acres. Historical records and current observations indicate that the Upper Santa Clara River, South Fork Santa Clara River, and Placerita Creek generally produce an ephemeral to intermittent flow regime, with flows in response to high intensity rainfall.

Within the northern extent of the study area, Placerita Creek transverses from east to west. Two ephemeral drainages running south to northwest occur on the south side of the study area, one to the west (western unnamed drainage) and one to the east (eastern unnamed drainage). These drainages converge along the western portion of the study area prior to exiting through a culvert under the railroad tracks, which eventually drains into Placerita Creek outside the study area. Generally, the water resources have been mapped by USFWS NWI (USFWS 2021) and USGS NHD (USGS 2020), and illustrated in Figure 5, Attachment A. The field delineation further refined the boundaries of this dataset and is provided in Figure 6, Attachment A.

Placerita Creek

Placerita Creek transmits water flows through the study area from the east, then drains into the Santa Clara River and eventually to the Pacific Ocean, a traditionally navigable water. USFWS NWI (2021) identifies the creek as “Riverine Intermittent”, containing flowing water only during part of the year. In addition, the presence of hydrophytic vegetation in the creek floodplain indicates presence of water more frequently than exclusively during or immediately after rainfall. For these reasons, the creek has been identified as intermittent.

During the field survey, no surface flow or saturation was observed in Placerita Creek. Within the study area, the eastern portion of Placerita Creek has been channelized with earthen levees on the north and south banks. The creek consists of a relatively broad, alluvial bed with several braided low-flow channels in which flows may fluctuate from year to year; however, one primary channel with a clearly defined OHWM was observed. The main low-flow channel was approximately 8 to 15 feet wide, while the entire creek from bank to bank ranged from approximately 60 to 335 feet wide. The OHWM within the creek was defined by the presence of scouring, shelving along the banks, textural changes of sediment, drainage patterns, drift debris, and change in vegetation cover.

One wetland sampling point ("SP01"), illustrated in Figure 6, was examined below the OHWM of Placerita Creek in the low flow channel where hydrophytic vegetation was observed. SP01 demonstrated a dominance of hydrophytic vegetation and satisfied the parameter for wetland hydrology via secondary indicators (drift deposits and drainage patterns). Soils were consistent with Riverwash, which are classified as hydric. Soils were closely analyzed for redox concentrations potentially indicating problematic hydric soils associated with vegetated sand and gravel bars within floodplains. However, no redox concentrations were observed, indicating that soils at SP01 are not hydric. The reach of Placerita Creek present in the study area was therefore mapped as a non-wetland waterway. Completed data sheets are provided in Attachment D.

Unnamed Drainages

No surface flow or saturation was present within the two unnamed drainages. Indicators consistent with the identification of the OHWM were observed in both drainages and are typical of small ephemeral drainages in the area, including textural changes and sorting of sediment, scouring, shelving along the banks, drift debris, and absence of vegetation. OHWM widths ranged between approximately three and ten feet. Refer to completed datasheets provided in Attachment D.

These drainages are classified as ephemeral because: (1) no standing water or soil saturation was observed during the survey, nor is it evident in recent or historical aerial photographs; (2) the primary source of surface hydrology is stormwater runoff; (3) groundwater does not provide a significant source of hydrology; (4) the drainage features do not support aquatic invertebrates; and (5) absence of hydrophytes. Additionally, the presence of continuous, well-developed upland vegetation along these features is a reliable indicator that they only temporarily convey surface flow during and immediately following storm events. These short-duration flows are not sufficient to support a predominance of wetland or riparian vegetation, and water does not collect for sufficient durations to develop hydric soils.

Assessment of Jurisdictional Waters and Wetlands

The Placerita Creek streambed and the ephemeral drainages within the study area are highly variable and site conditions may change seasonally. Defined regulatory limits within the study area are have been summarized in Figure 6, Table 1, and further discussed below.

Table 1 Jurisdictional Resources within the Study Area

Feature	USACE		RWQCB		CDFW	
	Non-Wetland Waters of the U.S.		Non-Wetland Waters of the State		Streambed and Associated Riparian Habitat	
	Acres	Linear feet	Acres	Linear feet	Acres	Linear feet
Placerita Creek	1.12	1,908	1.12	1,908	11.11	1,908
Western Ephemeral Drainage	0	0	0.18	347	0.18	347
Eastern Ephemeral Drainage	0	0	1.18	2,937	1.18	2,937
Total	**1.12**	**1,908**	**2.48**	**5,192**	**12.47**	**5,192**

USACE Jurisdiction

Placerita Creek is an intermittent stream that flows to a traditionally navigable water, and therefore subject to the jurisdiction of the USACE. USACE jurisdiction within the study area was defined by the limits of the OHWM identified during the field survey. The OHWM was defined from the presence of break in slope, change in vegetation cover, change in sediment particle size, scour, bank undercutting, and drift debris.

The unnamed ephemeral drainages are ephemeral drainages that support flow only during or immediately after rainfall and are therefore exempted from USACE jurisdiction under the current Navigable Water Protection Rule.

A total of 1.12 acres (1,908 linear feet) of non-wetland waters of the U.S. occur within the study area, as illustrated in Figure 6. No wetland waters of the U.S. were identified in the study area.

CDFW Jurisdiction

CDFW jurisdiction was defined by the top of bank (including the bed and bank of the stream) and associated riparian habitat. Therefore, CDFW jurisdiction included the outer edge of riparian vegetation, where present, and to the top of bank where riparian vegetation was absent, among Placerita Creek and the two unnamed ephemeral drainages.

A total of 12.47 acres (5,192 linear feet) of CDFW streambed and associated riparian habitat occur within the study area, as illustrated in Figure 6.

RWQCB Jurisdiction

RWQCB jurisdiction (waters of the state) was defined by the limits of the OHWM within Placerita Creek and the two ephemeral streams in the southern portion of the study area. The OHWM was defined from the presence of break in slope, change in vegetation cover, change in sediment particle size, scour and bank undercutting.

A total of 2.48 acres (5,192 linear feet) of waters of the state occur within the study area. No isolated waters of the state were identified within the study area.

Limitations, Assumptions, and User Reliance

This Jurisdictional Delineation Report has been performed in accordance with professionally accepted jurisdictional investigation practices conducted at this time and in this geographic area. The jurisdictional investigation is limited by the scope of work performed. The jurisdictional survey is limited also by the environmental conditions present at the time of the survey. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional delineation, and specified historical and literature sources. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

Please reach out to the undersigned with questions related to the contents herein.

Sincerely,
Rincon Consultants, Inc.

Thea Benson
Senior Biologist/Project Manager

Christopher Julian
Principal Regulatory Specialist

Attachments

Attachment A	Figures
Attachment B	Regulatory Framework
Attachment C	Representative Site Photographs
Attachment D	Completed Datasheets

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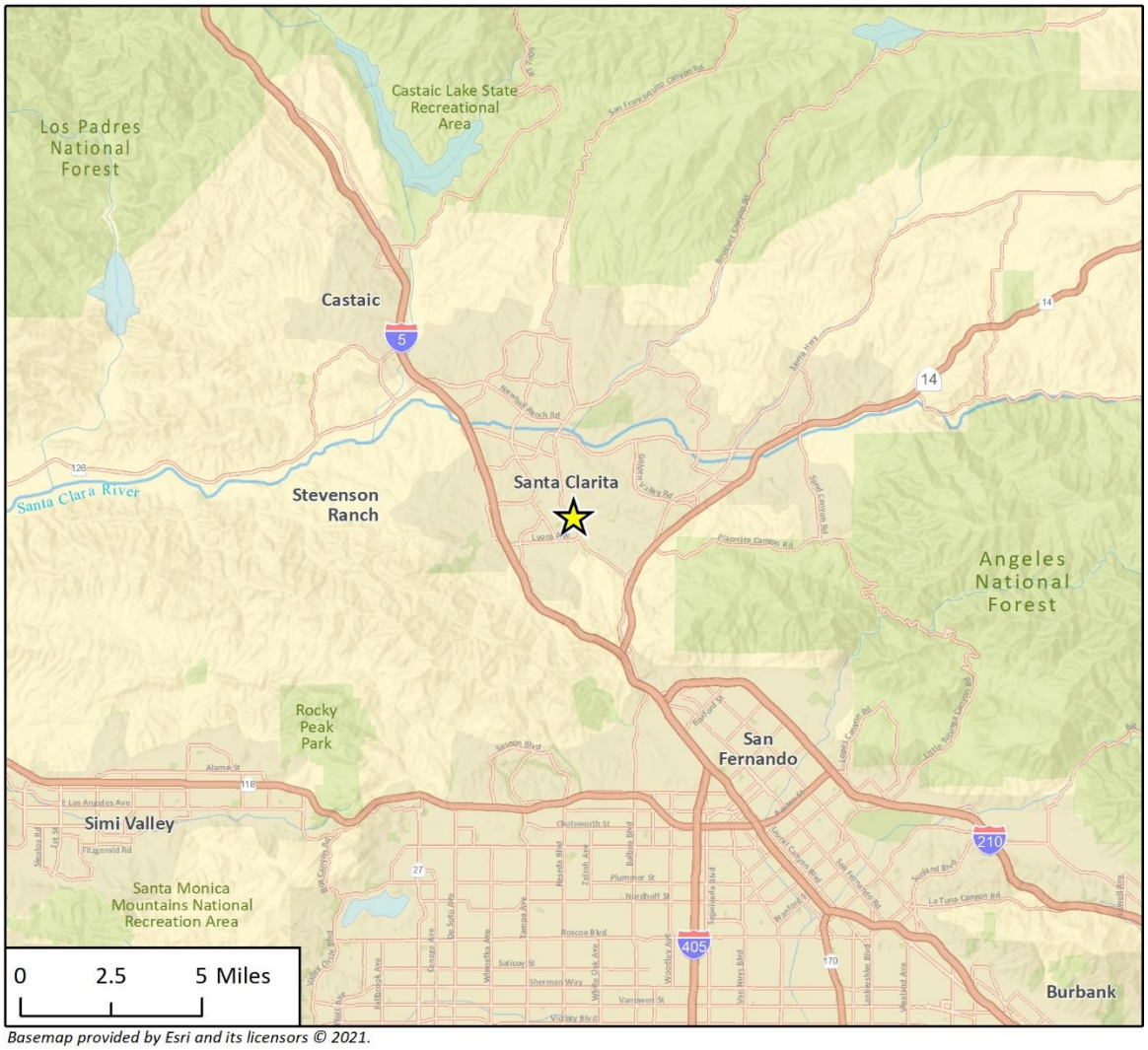
Attachment A

Figures

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2021.

Project Location

N

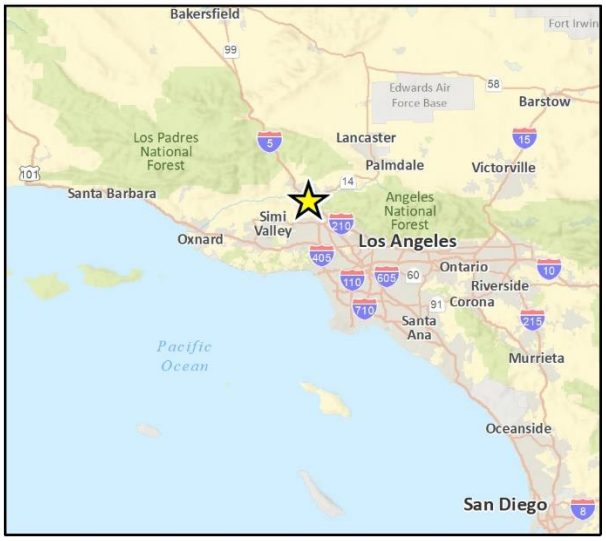


Figure 2 Study Area

Imagery provided by Microsoft Bing and its licensors © 2021.

Figure 3 Vegetation Communities and Land Cover Types

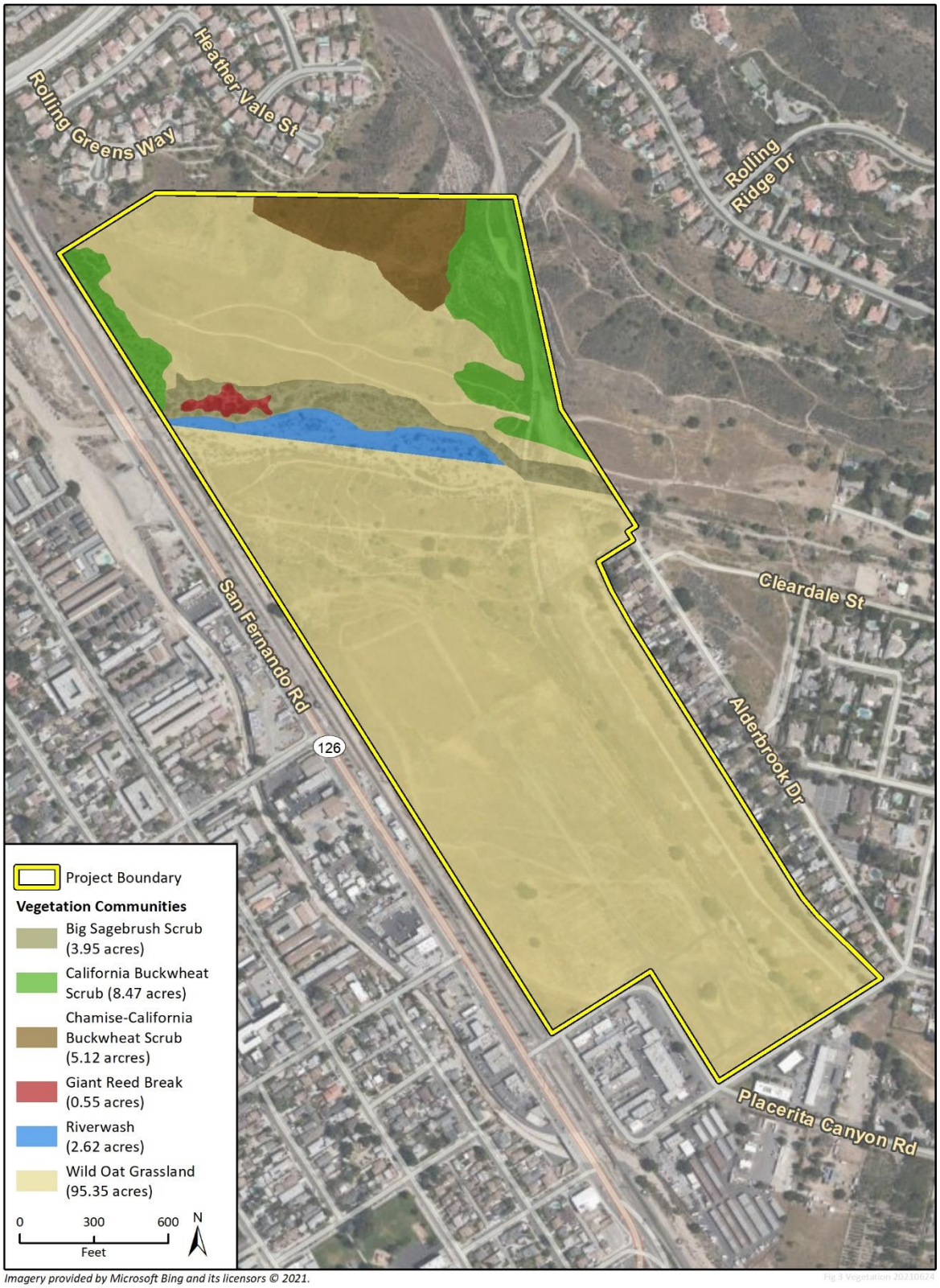


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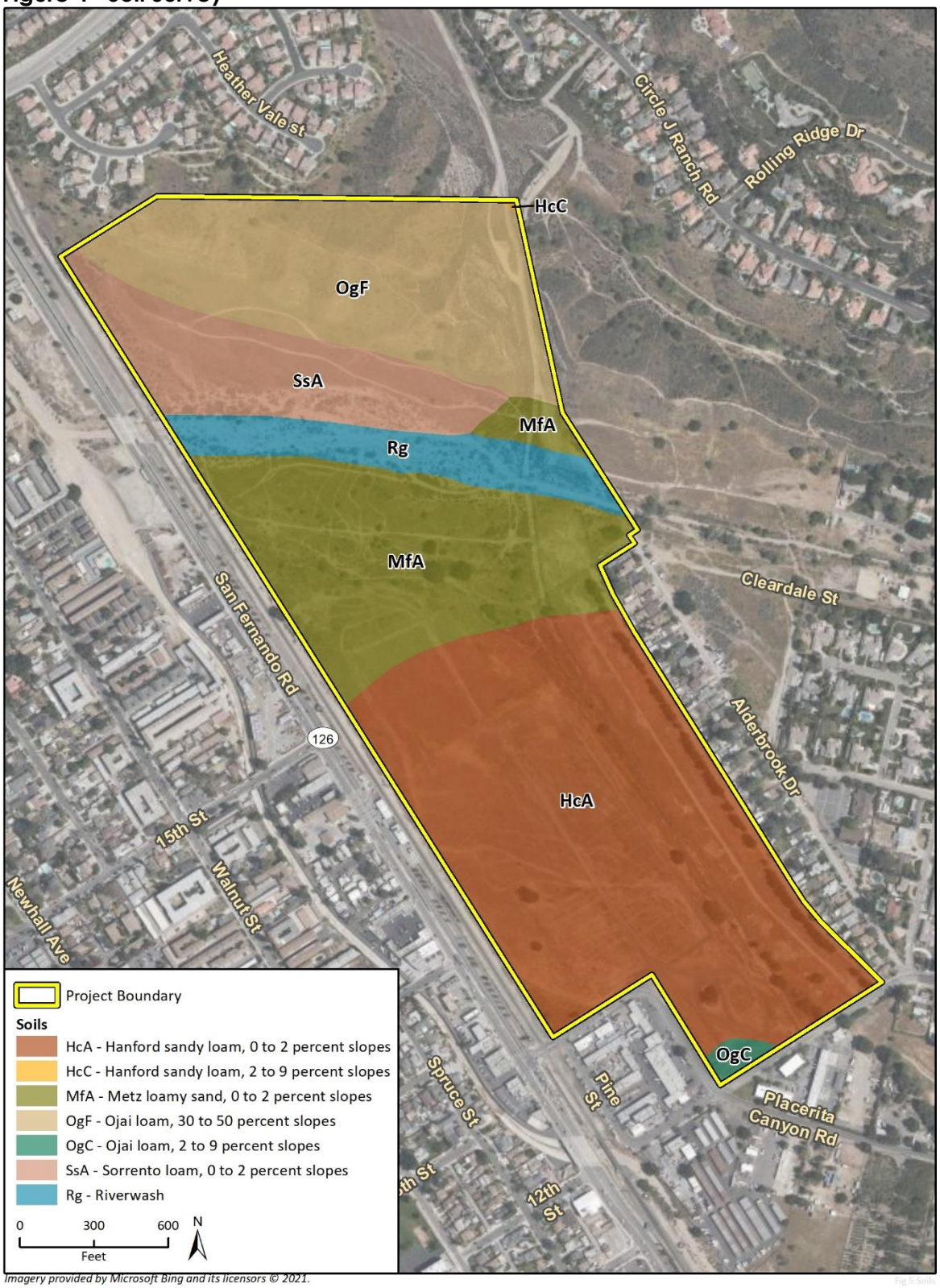
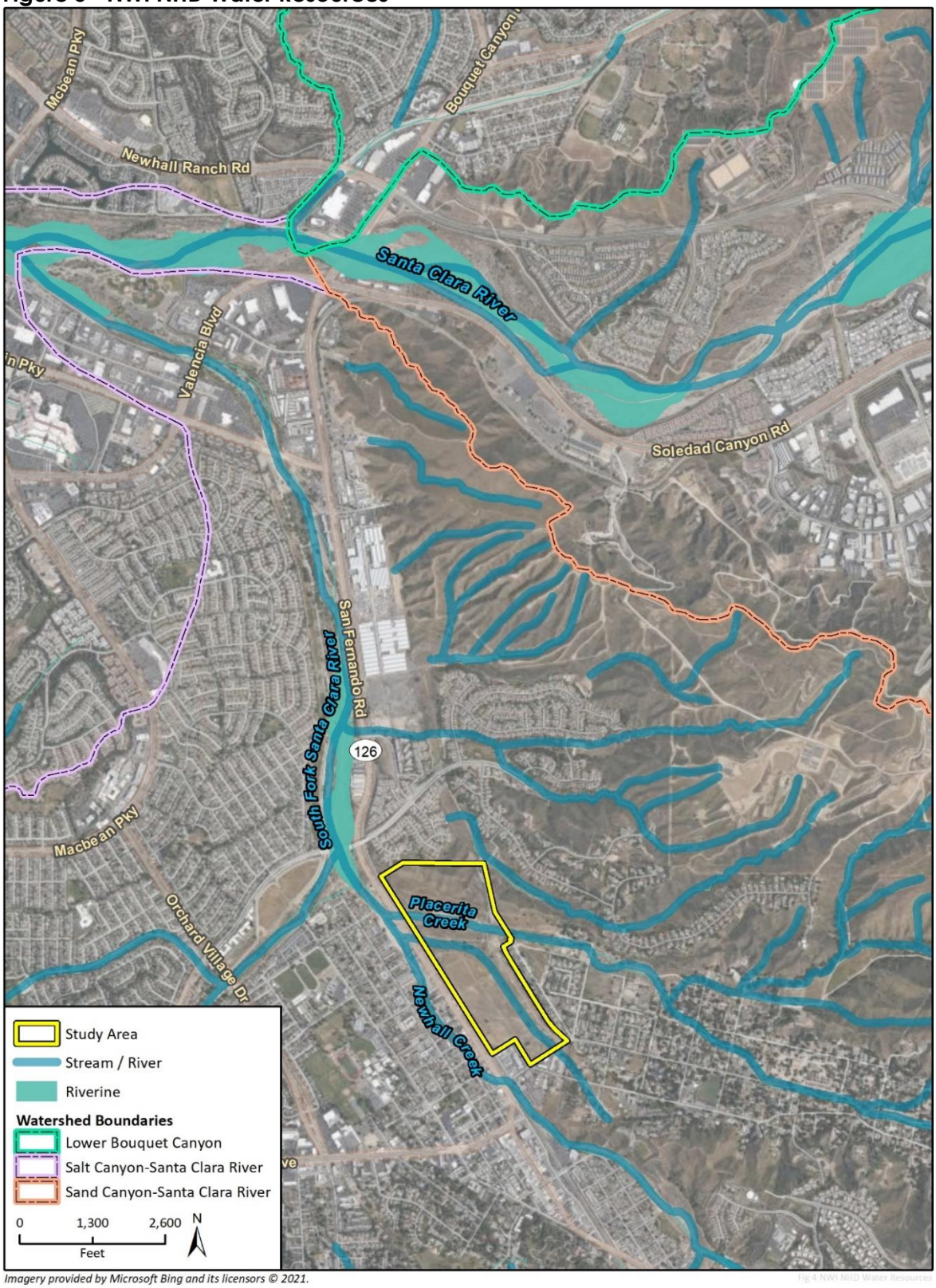
Figure 4 Soil Survey



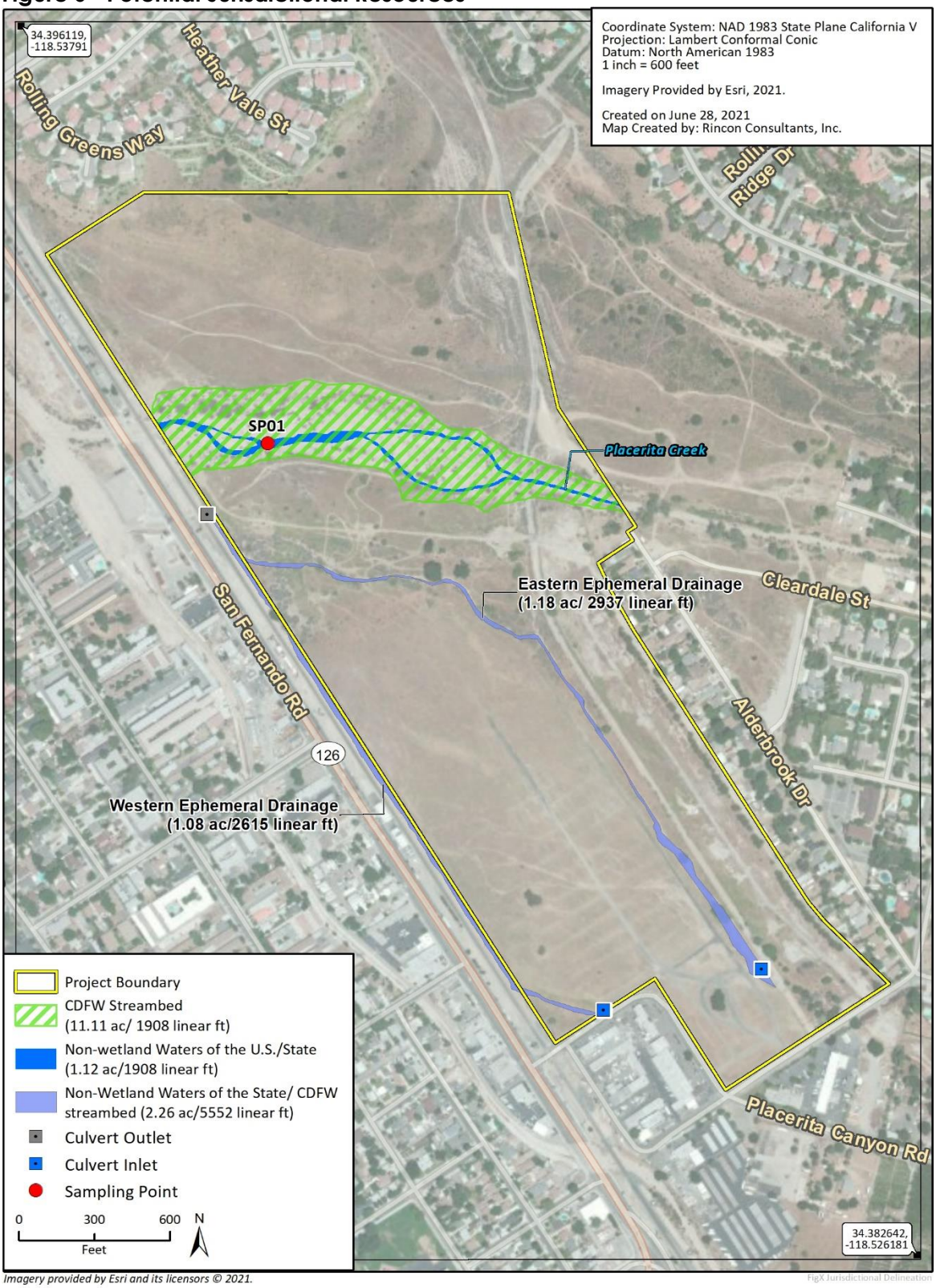
Imagery provided by Microsoft Bing and its licensors © 2021.
Additional data provided SSURGO, 2021.

Figure 5 NWI NHD Water Resources



Imagery provided by Microsoft Bing and its licensors © 2021.
Additional data provide by USFW, 2020.

Figure 6 Potential Jurisdictional Resources



Attachment B

Regulatory Framework

Regulatory Framework

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, State, and local levels. A number of federal and State statutes provide a regulatory structure which guide the protection of jurisdictional features. Agencies with the responsibility for protection of jurisdictional features within the project site include:

- United States Army Corps of Engineers (non-wetland waters and wetlands of the United States)
- Regional Water Quality Control Board (waters of the State)
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes)
- California Coastal Commission (coastal wetlands)

United States Army Corps of Engineers Jurisdiction

The United States Army Corps of Engineers (USACE), is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Under provisions of Section 404 of the Clean Water Act (CWA), the USACE regulates the placement of dredge or fill material into "waters of the United States." In administering this program, the USACE must consider factors including the need to minimize impacts while maintaining the applicant's objectives to the extent practicable, and the CWA's requirement that any permitted discharge of fill must be the least environmentally damaging practicable alternative. The process of obtaining a Section 404 permit can be onerous, and may include public noticing and comment, a robust alternatives analysis performed under the U.S. Environmental Protection Agency's (USEPA) Clean Water Act Section 404(b)(1) Guidelines, environmental review under the National Environmental Policy Act, required interagency consultation processes triggered by other federal laws, and costly compensatory mitigation.

To streamline the permitting process for routine types of projects the USACE has determined will have only minimal environmental impacts, the USACE has issued a series of General Permits, including Nationwide Permits (NWPs) issued at the national level and Regional General Permits (RGPs) issued at the regional level. For activities that meet the criteria, qualifying for coverage under a General Permit can be a boon because it eliminates the most complex steps in the permitting process (404(b)(1) analysis and NEPA review).

Waters of the U.S.

On April 21, 2020, the USACE and U.S. Environmental Protection Agency published the *Navigable Waters Protection Rule to define "Waters of the United States."* This rule, effective on June 22, 2020, defines four categories of jurisdictional features, documents certain types of waters that are excluded from jurisdiction, and clarifies some regulatory terms. Under the *Navigable Waters Protection Rule*, "waters of the United States" include:

(i) Territorial seas and traditional navigable waters;
(ii) Perennial and intermittent tributaries that contribute surface flow to those waters;

(iii) Certain Lakes and ponds, and impoundments of jurisdictional waters, and;
(iv) Wetlands adjacent to jurisdictional waters.

Tributaries are defined as "a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters in a typical year either directly or through one or more tributaries, jurisdictional lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands." The tributary category also includes a ditch that "either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch is perennial or intermittent and contributes surface water flow to a traditional navigable water or territorial sea in a typical year."

Adjacent wetlands are defined as wetlands that:

(i) Abut, meaning to touch at least at one point or side of, a defined water of the U.S.;
(ii) Are inundated by flooding from a defined water of the U.S in a typical year;
(iii) Are physically separated from a defined water of the U.S. by a natural berm, bank, dune, or similar natural features or by artificial dike, barrier or similar artificial structures as long as direct hydrological surface connection to defined Waters of the U.S. are allowed; or,
(iv) Are physically separated from a defined water of the U.S. only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the defined water of the U.S. in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The Navigable Waters Protection Rule states that the following areas not considered to be jurisdictional features even where they otherwise meet the definitions described above:

1) Groundwater, including groundwater drained through subsurface drainage systems;
2) Ephemeral features that flow only in direct response to precipitation including ephemeral streams, swales, gullies, rills and pools;
3) Diffuse stormwater runoff and directional sheet flow over uplands;
4) Ditches that are not defined Waters of the U.S. and not constructed in adjacent wetlands subject to certain limitations;
5) Prior converted cropland;
6) Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
7) Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
8) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
9) Stormwater control features constructed or excavated in uplands or in non-jurisdictional water to convey, treat, infiltrate, or stormwater run-off;
10) Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and,
11) Waste treatment systems.

USACE jurisdictional limits are typically identified by the ordinary high water mark (OHWM) or the landward edge of adjacent wetlands (where present). The OHWM is the "line on the shore established

by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 328.3).

Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

Obligate Wetland (OBL). Almost always occur in wetlands

Facultative Wetland (FACW). Usually occur in wetlands, but occasionally found in non-wetlands

Facultative (FAC). Occur in wetlands or non-wetlands

Facultative Upland (FACU). Usually occur in non-wetlands, but may occur in wetlands

Obligate Upland (UPL). Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g. riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board Jurisdiction

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant requests a pre-application meeting with the RWQCB, waits no less than 30 days, and then submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a “reasonable period of time” for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. Under current regulations, once initiated, the reasonable period of time cannot be stopped or paused. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued

it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 *et seq*.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

California Department of Fish and Wildlife Jurisdiction

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References "river," "stream," and "lake"
  - References "natural flow"
  - References "bed," "bank," and "channel"
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel

- Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
- Represent the depression between the banks worn by the regular and usual flow of the water
- Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
- Include the land that is covered by the water in its ordinary low stage
- Include lands below the OHWM

- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation

- **Guidance documents**, *including A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Attachment C

Representative Site Photographs

Photograph 1. View of Placerita Creek within the eastern portion of the study area, facing west. June 10, 2021.

Photograph 2. View of Placerita Creek channel, facing west. June 10, 2021.

Photograph 3. View of Placerita Creek along the western portion of the study area, facing railroad crossing to the west. June 10, 2021.

Photograph 4. View of eastern unnamed drainage as it enters into the study area from the east, facing east. June 10, 2021.

Photograph 5. View of eastern unnamed drainage, facing north. May 10, 2021.

Photograph 6. View of drainage inlet that drains into the western unnamed drainage feature within the study area, facing northwest. June 10, 2021.

Photograph 7. View of western unnamed drainage feature, facing west. June 10, 2021.

Photograph 8. View of western unnamed drainage feature running parallel to the railroad tracks, facing north. June 10, 2021.

Photograph 9. Convergence of the eastern and western unnamed drainages within the study area, and outlet under the railroad tracks along the western portion of the study area. Facing northwest. June 10, 2021.

Attachment D

Completed Datasheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Blackhall City/County: Newhall, LA Co. Sampling Date: 06/10/2021

Applicant/Owner: Blackhall Studios State: CA Sampling Point: 01

Investigator(s): ~~Thea Benson~~, Malek Al-Marayati Section, Township, Range: T4N, R16W, Section 35

Landform (hillslope, terrace, etc.): low flow channel Local relief (concave, convex, none): concave Slope (%): 1%

Subregion (LRR): C- Mediterranean California Lat: 34.389318 Long: 118.53207W Datum: WGS84

Soil Map Unit Name: Riverwash NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:
Placerita Creek is an intermittent ~~ephemeral~~ stream consisting of sandy soils with patches of sandbar willow and giant reed stands. No soil saturation or flowing/standing water. ~~DRAINS TO SANTA CLARA RIVER~~

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. —			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ~8 x 8 Ft)			
1. sandbar willow	40 %	Y	FACW
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. —			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. —			
2.			
	40 = Total Cover		

% Bare Ground in Herb Stratum 80 % % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:
sandy low flow channel in ephemeral stream

SOIL

Sampling Point: 01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2		N/A				medium course sand/sandy loam	
6-18	10YR 3/2		N/A				clay	smooth-no grain

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

sandy, dry soils with no redox

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- X Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sample point w/in low-flow channel w/ medium grain sandy soils

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Blackhall Studios
Project Number: 21-11189
Stream: Placerita Creek - tributary
Investigator(s): Thea Benson
Date: 06/10/2021 **Time:** 0830
Town: Newhall **State:** CA
Photo begin file#: **Photo end file#:**

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details: eastern drainage unnamed ephemeral tributary

Projection: Mercator **Datum:** WGS84

Coordinates: 34.385629°, -118.528279° elev. 6,870ft

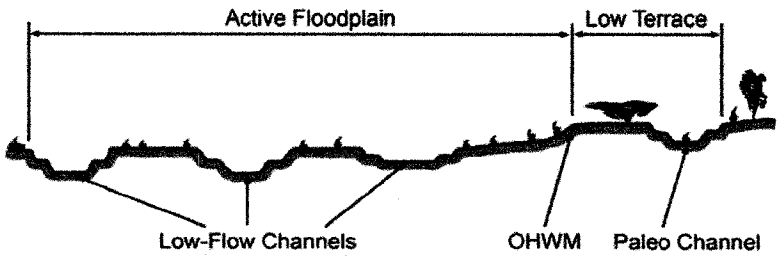
Potential anthropogenic influences on the channel system:
broken pieces of asphalt, steel culvert entry into site.

Brief site description:
undeveloped site, disturbed by roads and hiking/OHV trails, non-native grasses. No water present.

Checklist of resources (if available):

- ☐ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☑ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

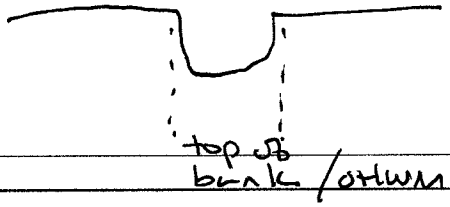


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☑ GPS
   - ☑ Digitized on computer
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** 06/10/2021 **Time:** 0830

Cross section drawing:



OHWM

GPS point: 34.385623°, -118.528272°

Indicators:

- [ ] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

- steep banks ~ 3-5 ft in depth. upland non native grasses and mustards along banks

- less vegetated in channel

Floodplain unit: [x] Low-Flow Channel [ ] Active Floodplain [ ] Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: cobble, small rock

Total veg cover: 75 % Tree: ____ % Shrub: ____ % Herb: 75 % non native grasses and mustards

Community successional stage:

- [ ] NA
- [x] Mid (herbaceous, shrubs, saplings)
- [ ] Early (herbaceous & seedlings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

clearly defined bed + banks - steep bank

Project ID: **Cross section ID:** **Date:** 06/10/2021 **Time:** 0830

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☒ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: 75 % Tree: _____ % Shrub: _____ % Herb: 75 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

clearly defined bed + bank

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Blackhall Studios
Project Number: 21-11189
Stream: Placerita Creek
Investigator(s): Thea Benson

Date: 06/10/2021 **Time:** 10:50 am
Town: Newhall **State:** CA
Photo begin file#: **Photo end file#:**

Y [X] / N [ ] Do normal circumstances exist on the site?

Y [X] / N [ ] Is the site significantly disturbed?

Location Details: Placerita Creek - Main Channel

Projection: Mercator **Datum:** WGS84
Coordinates: 34.391619, -118.533668

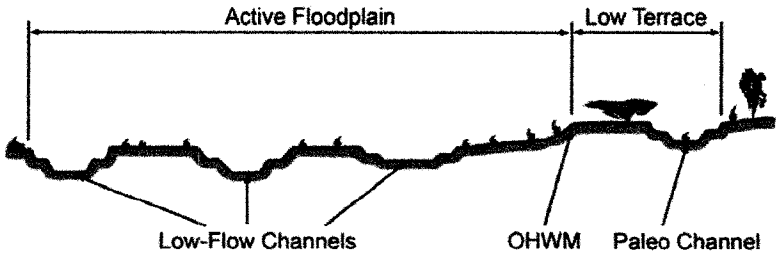
Potential anthropogenic influences on the channel system:
Homeless camps, several walking + OHV trails

Brief site description: NO water Present
- Main channel with several paleo channels @ slightly higher elevations
- sagebrush habitat with some patches of Giant Reed.

Checklist of resources (if available):

- [ ] Aerial photography
  Dates:
- [X] Topographic maps
- [ ] Geologic maps
- [ ] Vegetation maps
- [X] Soils maps
- [ ] Rainfall/precipitation maps
- [X] Existing delineation(s) for site
- [X] Global positioning system (GPS)
- [ ] Other studies
- [ ] Stream gage data
  Gage number:
  Period of record:
- [ ] History of recent effective discharges
- [ ] Results of flood frequency analysis
- [ ] Most recent shift-adjusted rating
- [ ] Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

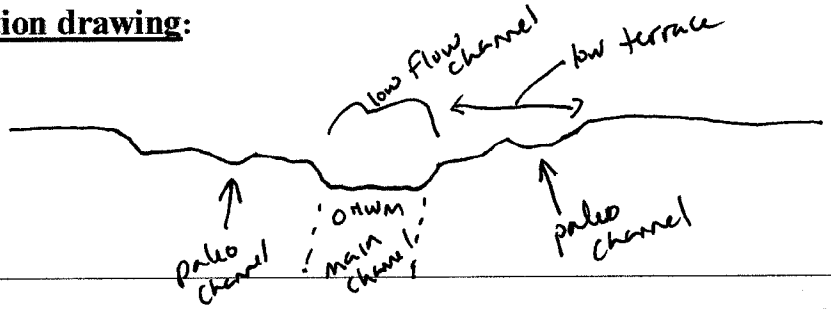


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - [ ] Mapping on aerial photograph
   - [X] GPS
   - [X] Digitized on computer
   - [ ] Other:

Project ID: **Cross section ID:** **Date:** 06/10/2021 **Time:** 1050 AM

Cross section drawing:



OHWM

GPS point: 34.391619, -118.533668

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

~~slender leaf willow~~

Sandbar willow, mulefat, scale broom, break in slope, sandy stream bottom - medium grain -

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [x] Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: medium grain sand - some silt

Total veg cover: 50 % Tree: ____ % Shrub: 40 % Herb: 10 %

Community successional stage:

- [ ] NA
- [ ] Early (herbaceous & seedlings)
- [x] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [x] Benches
- [x] Soil development
- [ ] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

point taken @ break in slope.

Project ID: **Cross section ID:** **Date:** 06/10/2021 **Time:** 10:50

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: ~~brown~~ sandy-medium coarse

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

low flow channel with scattered scale broom and sandbar willow

- mostly unvegetated

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Blackhall
Project Number: 21-11189
Stream: unnamed ephemeral
Investigator(s): Malek Al-Marayati

Date: 6/10/21 **Time:** 9:00 am
Town: Santa Clarita **State:** CA
Photo begin file#: **Photo end file#:**

Y ☐ / N ☒ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details: East of railroad ave. in SC.

Projection: **Datum:** WGS84
Coordinates: 34.39041, -118.535195

Potential anthropogenic influences on the channel system:
Homeless camps + trash dumping in streambed. Hydrology manipulated upstream to flow from runoff toward Santa Clara River. Railroad berm causes channel to re-direct northward.

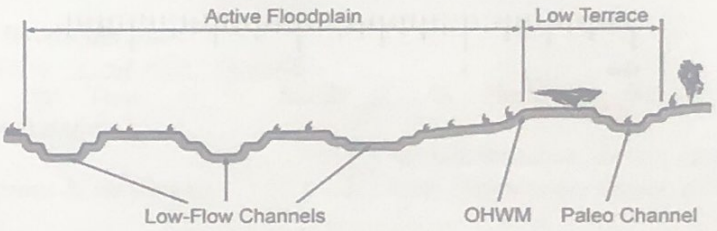
Brief site description:
Single channeled ephemeral stream conveying flow northward toward Santa Clara River. Banks dominated by Hirschfeldia incana upstream + Artemisia tridentata downstream.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

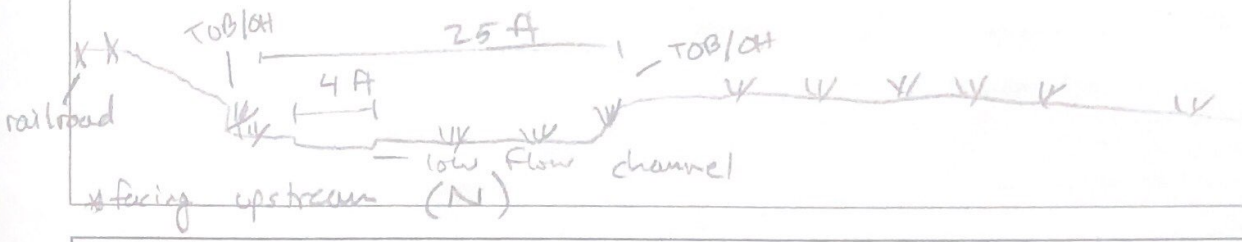


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☑ Digitized on computer
   - ☑ GPS
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** **Time:**

Cross section drawing:



OHWM

GPS point: 34.390389, -118.535165

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Below OHWM dominated by Artemisia tridentata + Hirschfeldia incana.

Floodplain unit: [x] Low-Flow Channel [ ] Active Floodplain [ ] Low Terrace

GPS point: 34.390445, -118.535228

Characteristics of the floodplain unit:

Average sediment texture: course sand

Total veg cover: 6 % Tree: 0 % Shrub: 0 % Herb: 6 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [x] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

Brassica nigra seedlings in low flow

Project ID: **Cross section ID:** **Date:** **Time:**

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: 34.39 0487, -118.535222

Characteristics of the floodplain unit:

Average sediment texture: medium silt

Total veg cover: 80 % Tree: 0 % Shrub: 70 % Herb: 10 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

A. tridentata dominant in shrub layer, Hirschfeldia incana dominant in herbaceous understory.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Appendix F

Rare Plant Survey Reports

F1

Devco SC 2015 Rare Plant Survey Report

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455
FAX 644 4240

info@rinconconsultants.com
www.rinconconsultants.com

August 4, 2015
Rincon Project No. 15-01375

Christopher Prather
Ravello Holdings, Inc.
211 Village Commons, Suite 11
Camarillo, CA 93012

Subject: Results of the 2015 Rare Plant Surveys, Devco Santa Clarita, Los Angeles County, California

Dear Mr. Prather:

This letter report documents the findings of the 2015 rare plant surveys conducted by Rincon Consultants, Inc. (Rincon) on behalf of the Ravello Holdings, Inc to determine the presence or absence of special status plant species pursuant to the California Environmental Quality Act (CEQA) Guidelines §15380. Rincon has prepared this Rare Plant Survey Report to document special status plant species observed within the project site and to present recommendations for and feasible avoidance, minimization, and mitigation measures to compensate for potential impacts to such resources.

Three separate rare plant surveys were conducted in 2015. The survey area included the project boundary, except for the steep topography on the northeast corner of the project boundary, as shown in Attachment 1, Figures 1 and 2. The approximately 90 acre site is undeveloped north of Placerita Creek, and hosts a racetrack/runway. The site is vegetated by non-native annual grassland with scattered oaks, alluvial and mule fat scrub, great basin sage scrub, coastal sage scrub, great basin scrub, and disturbed areas. The site has been impacted by disking, trials and dirt roads, paved and graveled areas, and ornamental tree plantings.

The proposed project is to develop single family residential lots, two-story town homes, parking, infrastructure, and parklands on an approximately 92 acre underdeveloped site. The residential development footprint would be located on approximately 55 acres south of Placerita Creek, which bisects the project site. The north side of Placerita Creek would remain as an open natural area. Within the residential development footprint, five existing oak trees would be preserved on the onsite parks. The Metrolink railroad track and Railroad Avenue border the western

portion of the site, and a Metropolitan Water District pipeline and easement is present on the eastern edge of the project site, and residential development along Alderbrook Road to the east. The proposed project is located directly east of downtown Newhall, within the City of Santa Clarita.

METHODOLOGY

Prior to site visits, previous botanical survey results were reviewed and local experts were consulted. These previous efforts include surveys completed by Christopher A. Joseph and Associates (2009), Tetra Tech (2005), and Frank Hovore & Associates (2004). No special status or rare plant species were detected during previous surveys. The *Vascular Flora of the Liebre Mountains, Western Transverse Ranges, California* (Boyd, 1999), and other local references were also reviewed.

For the purpose of this report, special status taxa consist of plants: 1) listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA); 2) listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); 3) recognized on the California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) Lists 1B and 2. The CRPR also includes Lists 3 and 4; however, in accordance with the CDFW (2009), these plants typically do not warrant consideration under CEQA Guidelines §15380 unless the specific circumstances relevant to local distributions make them of potential scientific interest. Similarly, local agencies may also consider and list additional plants to be of "local concern" because of local or regional scarcity as determined by that agency (per the CEQA Guidelines §15380). The City of Santa Clarita does not have such a list.

Rincon biologists reviewed the California Natural Diversity Database (CNDDB), CDFW Biogeographic Information & Observation System (BIOS) viewer, CNPS Online Inventory, and USFWS Information, Planning, and Conservation System Query ([IPAC]; 2015) for lists of plant species reported from the vicinity of the project and the surrounding area prior to conducting field work. The CNDDB query was conducted for occurrences of special status plant species documented within a 5.0 mile radius. The CNPS queries were specifically conducted for occurrences of special status plant species documented within the *Newhall, California* USGS 7.5-minute topographic quadrangle and the surrounding quadrangles: *Whitaker Peak, Warm Spring Mountain, Green Valley, Mint Canyon, Newhall*, *San Fernando, Santa Susana*, V*al Verde,* and *Oat Mountain, California*. See Attachment 2 for a summary table listing the results of these database queries and an assessment of potential for special status and rare plant species to occur on the project site.

The survey area (Attachment 1, Figures 1 and 2) was developed based on the proposed residential development footprint on the south side of Placerita Creek, and to account for potential drainage improvements on the north side of Placerita Creek. The steep topography on the north east corner of the project site was not surveyed since development is not proposed in that area. The Metropolitan Water District easement was surveyed where accessible. The development footprint is not located within a high-fire hazard severity zone; no on-site or off-site fuel modification areas were surveyed (CalFire, 2015).

In 2015, Rincon botanists visited reference populations for several species with potential to occur in the survey area, including known occurrences of Braunton's milkvetch (*Astragalus brauntonii*), round-leaved filaree (*California macrophylla*); several mariposa lilies, including Catalina mariposa-lily (*Calochortus catalinae*) and club-haired mariposa-lily (*Calochortus clavatus* var. *clavatus*), and paniculate tarplant (*Deinandra paniculata*), to gauge blooming status and determine that these taxa were identifiable in 2015. Surveys were timed accordingly to appropriately capture site conditions at peak of bloom for this year. Surveys were timed to appropriately capture earlier and later blooming plants at peak of bloom for this year.

The 2015 rare plant surveys were conducted April 3, May 7, and June 30, 2015, as shown in Table 1. The April 3, 2015, survey was conducted by Rincon senior botanist Dan Rosie and associate botanist Marcus Jones. This survey captured early blooming species, based on fairly early seasonal onset of this year's blooming period, and documentation of bloom at reference sites. On May 7, 2015, senior botanist Dan Rosie and associate botanist Marcus Jones completed the second survey. The second survey captured mid- to late-blooming species, based on confirmation of bloom at reference populations. On June 30, 2015 senior botanist Jon True and botanist Mitchell Provance completed the third survey. The third survey captured late-blooming species, based on confirmation of bloom at reference populations. The botanical survey specifically focused on determining the presence or absence of special status plant species in the survey area. The project site and survey area are depicted on Attachment 1, Figures 1 and 2.

Table 1: 2015 Rare Plant Survey Details

Survey	Botany Staff	Date	Survey Hours
1	Dan Rosie Marcus Jones	April 3, 2015	09:00 to 17:00
2	Dan Rosie Marcus Jones	May 7, 2015	7:15 to 12:00 12:30 to 15:30
3	Mitchell C. Provance Jon True	June 30, 2015	07:30 to 11:00 11:30 to 14:30

Surveys were conducted over 100 percent of the survey area during the appropriate blooming period (March–June) and in accordance with the guidelines established by the CDFW (2009), CNPS (2001), and USFWS (1996). The plant survey protocol

included the following key elements: 1) the survey team traversed the entire project site on foot to ensure thorough coverage of the area; 2) surveys were spaced throughout the spring/summer growing season to accurately capture bloom periods for regionally known rare flora; 3) all plant species observed were identified to a sufficient level to determine rarity; and 4) survey timing was informed by reference site visits made by Rincon biologists to known populations of rare plants in the southern California region. The team was equipped with a GPS unit, standardized field notebooks and checklists for field annotations when applicable, and an aerial photograph of the proposed project site at a scale of 1 inch to every 200 feet.

Taxonomic nomenclature in this Report is based on the following resources in the second edition of *The Jepson Manual* (Baldwin et al., 2012), and the Jepson Online Interchange for California Floristics (http://ucjeps.berkeley.edu/interchange.html).

ENVIRONMENTAL SETTING

The project site is an undeveloped 92-acre parcel located in the southern portion of the City of Santa Clarita. The southern half of the project site consists of a relatively flat (0-1% slopes), disturbed open field that appears to be regularly disked and traversed by off-road vehicles. A steeply sloped (>25%) hillside supporting patchy shrub cover occupies the northern border of the project site. Placerita Creek is a prominent feature on the site, which flows from east to west and traverses the central portion of the site. With the exception of the northern boundary, the project site is relatively level and ranges in elevation between approximately 1,250 and 1,320 feet above mean sea level (msl), sloping gently downward from the northeast to the southwest. The project site is situated between a rural residential area to the east and a commercial-industrial area to the west along Railroad Avenue. Also located along the western boundary of the project site running parallel to Railroad Avenue is the Newhall Metrolink Railroad Right-of-Way. A utility corridor and a rural residential neighborhood are situated to the east. In 2004, the City of Santa Clarita completed installation of the Placerita Canyon Sewer Backbone, which traverses the project site parallel to and east of Placerita Creek.

The U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) has mapped six soil types on the project site:

- Hanford sandy loam, 0 to 2 percent slopes (HcA),
- Metz loamy sand, 0 to 2 percent slopes (MfA),
- Riverwash (Rg),
- Sorrento loam, 0 to 2 percent slopes (SsA),
- Ojai loam, 2 to 9 percent slopes (OgC), and (6) Ojai loam, 30 to 50 percent slopes (OgF).18

The Hanford series, mapped in grasslands within the southern half of the project site, consists of very deep, well-drained soils generally located on stream bottoms

and is formed in sandy alluvium from dominantly granitic alluvium; the soil profile is described as having a fine sandy loam texture. The Metz series, mapped just south of Placerita Creek, consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. This series consists of fine sandy loams and typically occurs on floodplains and alluvial fans. Riverwash soils occur within the Placerita Creek channel. This soil type is typically sandy, gravelly, or cobbly, it is somewhat poorly drained and experiences frequent flooding. Riverwash is listed as a hydric soil on the NRCS 2008 *Hydric Soils List* for the Ventura Area. The Sorrento series, mapped along the northern bank of Placerita Creek consists of very deep, well drained, moderately alkaline soils that formed in medium textured alluvium, mostly from sedimentary formations. Sorrento soils occur on alluvial fans and stabilized floodplains and have a fine-loamy texture. Soils on the northern slopes and southern tip of the project site are mapped as the Ojai series, which consists of well drained loamy soils that are formed in alluvium derived from sedimentary rock and occur on terraces.

The project site is surrounded by fairly dense and continuous development. Adjacent land uses include residential uses to the north, east, and south, including extensive oilfields to the east, and commercial and light industrial uses to the west. The project site is not directly connected to any large, contiguous open space areas, although it eventually drains into to the Santa Clara River. Partially undeveloped areas in the vicinity include steep slopes of Oakdale Canyon to the north, Quigley Canyon to the east and along ridgetop areas to the south that extend from Railroad Avenue southeast to Highway 14. Areas from the project site extending west support dense commercial development.

Vegetation types found on the project site during 2015 site surveys are largely consistent with vegetation communities mapped in 2009 as shown in Attachment 1, Figure 4 (CAJA, 2009). Habitats within the survey area are primarily comprised of non-native annual grassland with scattered oaks, alluvial and mule fat scrub, great basin sagebrush scrub, coastal sage scrub, ruderal California buckwheat scrub, river wash, and disturbed areas. The vegetation mapping will be updated as part of the Biological Resource Assessment that will be prepared to support the City's environmental review process.

The following vegetation communities were mapped in 2009 within the project boundary:

Non-Native Annual Grassland/Ruderal

This plant community covers the majority of the site and occurs in a large open, flat area within the southern half of the site. Non-native annual grassland typically occurs in open areas of valleys and foothills throughout California, usually on fine textured clay or loam soils that are somewhat poorly drained. This community is dominated by non-native annual grasses and forbs that are common to the region. Common non-native annual grass species found on the project site include schismus

(*Schismus barbatus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), rattail fescue (*Festuca myuros*), and cheat grass (*Bromus tectorum*). Ruderal forbs such as perennial mustard (*Hirschfeldia incana*), horehound (*Marrubium vulgare*), telegraph weed (*Heterotheca grandiflora*), and tocolote (*Centaurea melitensis*) were also commonly observed within this community. In addition, there are a few scattered mature coast live oaks (*Quercus agrifolia*) and valley oaks (*Quercus lobata*) in the southwestern corner of this community on the project site. This community exhibits evidence of regular human disturbance, as it is traversed by several actively used dirt roads and trails and graveled roadways, and supports a homogenous, predominantly non-native plant species composition and low habitat complexity.

Non-Native Annual Grassland/Scattered Shrubs

This community occurs as an isolated patch just south of the Placerita Creek channel along the eastern project site boundary. This community supports a similar composition of herbaceous species as the non-native grassland/ruderal community described previously, with the addition of scattered rabbitbrush (*Chrysothamnus nauseosus*), California buckwheat (*Eriogonum fasciculatum*), Great Basin sagebrush (*Artemesia tridentata*), scalebroom (*Lepidospartum squamatum*), Mexican elderberry, (*Sambucus nigra* ssp. *caerulea*), Palmer's golden bush (*Ericameria palmeri var. pachylepis*), and yerba santa (*Eriodictyon crassifolium* var. *nigrescens*) shrubs. The mixed shrub cover comprises approximately 10% of the overall cover in this community.

Ruderal California Buckwheat Scrub

This plant community was mapped on disturbed sandy/gravelly loam soils in two distinct portions of the project site:

- Northeast corner of the project site south facing slopes, growing in association with yerba santa and chamise (*Adenostoma fasciculatum)* and,
- Northwest corner of the project site in a flat, disturbed area east of the railroad tracks.

Although this community was dominated by California buckwheat shrubs, perennial mustard, telegraph weed, and Russian thistle (*Salsola tragus*) occur as common weedy associates. Additionally, annual grasses comprise the herbaceous understory including wild oat, schismus (*Schismusbarbatus*), and red brome (*Bromus madritensis*).

Great Basin Sagebrush Scrub

This plant community forms a continuous corridor along the dry, upper terraces of Placerita Creek, with its highest density along the south side of the creek channel where it is bisected by an unnamed ephemeral drainage (Drainage A). Shrub cover is moderate to dense and height ranges from 1 to 2.5 meters. Commonly associated shrubs include Great Basin sagebrush, California buckwheat, Mexican elderberry; understory herbaceous species include perennial mustard and annual grasses such

as red brome and schismus. This community intergrades with Riverwash along the northern boundary and non-native annual grassland to the south.

Alluvial Scrub

This plant community occurs in pockets on alluvium of dry terraces associated with Placerita Creek. Dominant plant species observed in this community are those that colonize and persist within infrequently scoured floodplains and include native shrubs such as California buckwheat, scalebroom (*Lepidospartum squamatum*), and Palmer's goldenbush (*Ericameria palmeri var. pachylepis*). Common non-native species include tree tobacco (*Nicotiana glauca*) and giant reed (*Arundo donax*). Alluvial scrub as it occurs in the project site is characterized by a disturbed and highly mixed plant species composition, landscape position, and soils derived from alluvium.

Mulefat Scrub

This plant community occurs in low terraces along the downstream portion of the intermittently flooded Placerita Creek channel where it discharges into the South Fork of the Santa Clara River west of the project site. The vegetation is characterized by a low diversity assemblage of plant species that colonize and persist within infrequently scoured floodplains and include native shrubs such as mulefat (*Baccharis salicifolius*), a stream-dependent (riparian) woody plant species, and scalebroom (*Lepidospartum squamatum*). Though there are a few native species present, the vegetation structure of this community is fragmented and disturbed. The remaining associated plant species in this community include non-native disturbance related species, such as giant reed, tree tobacco, and perennial mustard.

River Wash

This community is located within an open, unvegetated or sparsely vegetated channel of Placerita Creek that is maintained by scouring from intermittent stream flows. The substrate is comprised of gravel, cobble, sand, and scattered woody debris in the main channel, with finer silty soils and sparse annual grass and shrub cover on lower terraces. Areas mapped as river wash on site occurs within the low-flow channel and sporadically includes native shrubs such as scale-broom, mulefat, and Palmer's goldenbush, as well as a variety of herbaceous species, such as annual burweed (*Ambrosia acanthicarpa*) and telegraph weed (*Heterotheca grandiflora*), and tree tobacco; however, these species appear to be temporary inhabitants that do not persist for long periods due to annual flooding episodes. River wash is a naturally dynamic habitat and may shift and change position within drainages, depending on flood volumes and regularity.

Barren

Though not a vegetation community, the existing dirt roads and other areas that are essentially devoid of vegetation are classified as barren. These disturbed areas, although unvegetated and exhibiting heavily disturbed soils, support limited wildlife including California ground squirrels (*Spermophilus beecheyi*) as evidenced by

direct observation and burrows, and other small mammals as evidenced by scat and tracks.

RESULTS

Attachment 2 provides a list of special status plants species resulting from database queries and an assessment of their potential to occur within the survey area. Attachment 2 details those plants specifically searched for, however, the survey was floristic and comprehensive and other rare plants, if present, would have been identified.

Assessment of Potential to Occur
Queries of the CNDDB and CNPS Inventory produced a list of 43 special status plants known from the vicinity of the project site. Using information from the various listed sources and floral surveys of the area, a list of special status taxa that could potentially occur within the development area and project boundary was developed. An evaluation of the likelihood of occurrence within the development area and project boundary was conducted based upon species' local distribution and habitat requirements (e.g., vegetation community type, soil type, elevation). The potential for special status species to occur within the development area and project boundary was assessed as present, high, moderate, low, or none based on the following criteria:

- Present: The species was observed within the project during field surveys, or documented from the site during previous surveys.
- High: CNDDB or other documented occurrences have been recorded within 1.0 mile of the project and suitable habitat is present. Individuals were not observed during field surveys; however, the species could be present or otherwise impacted by the project.
- Moderate: CNDDB or other documented occurrences have been recorded within the project vicinity (i.e., within five miles) and suitable habitat is present. Individuals were not observed during field surveys; however, the species could be present or otherwise impacted by the project.
- Low: Suitable or marginal habitat may occur within the project, but: no CNDDB records of the species have been recorded within 25 years; records of the species within five miles of the project are suspected to be now extirpated or potentially misidentified with other species; or individuals were not observed during field surveys and are not anticipated to be present.
- None: Plant species identified in the literature review and determined to have no potential to occur within the project because the project does not contain suitable habitat, is located out of the species' known geographic range, or is located out of the species' known elevation range limits.

A table showing the evaluation for all 43 special status and rare plant species is included in Attachment 2. Based on vegetation, topography and soils present within

the project boundary, only one (1) special status species (e.g., federally or state listed, CRPR List 1 and 2) and five (5) CRPR List 3 and 4 plants are considered to have a "moderate" or "high" potential to occur within the survey area.

Threatened and Endangered Plant Species

No state or federally listed plant species were detected during 2005, 2009, or 2015 surveys, nor are any expected to have a "moderate" or "high" potential to occur within the survey area or project boundaries.

CEQA Special Status Plant Species

No plant species protected under the CEQA Guidelines (i.e., federally or state listed CRPR 1 or 2) was detected during 2005, 2009, or 2015 surveys. The slender mariposa-lily has a moderate potential to occur, as discussed below.

Slender mariposa-lily (*Calochortus clavatus* var. *gracilis*). Perennial bulbiferous herbs in the Liliaceae family found in chaparral, coastal scrub, and valley/foothill grassland. Disturbed coastal scrub and grasslands present on-site provide marginally suitable habitat for this species. A recent (2010) CNDDB record of approximately 40 polygons occurs in mountainous terrain on steep slopes 0.75 miles to the northwest of the project site. These records occur in coastal sage scrub/chaparral in soil classified as Ojai Loam, both of which occur which on the project site north of Placerita Creek. Not observed during 2005, 2009, and 2015 surveys.

Other Plants Species

Plants with a CRPR of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Plants with a CRPR of 4 are generally not afforded protection under the CEQA, but are included and disclosed in this report for informational purposes.

The 2009 Biological Site Assessment Report species list includes the Catalina mariposa-lily (*Calochortus catalinae*) and southern California black walnut (*Juglans californica),* which have a CRPR rank of 4.2 (Plants of Limited Distribution).

According to CNPS, certain CRPR 4 species may be significant locally, and may warrant evaluation for impacts, based on CEQA Guidelines § 15125 (c) and/or § 15380. This may be particularly appropriate for:

- The type locality of a CRPR 4 plant,
- Populations at the periphery of a species' range,
- Areas where the taxon is especially uncommon (rare),
- Areas where the taxon has sustained heavy losses, or

- Populations exhibiting unusual morphology or occurring on unusual substrates (CNPS, 2015).

CRPR 4 plants species detected onsite during past surveys, Catalina mariposa-lily and southern California black walnut, do not meet the definition of special status under CEQA. The four (4) plants with a CRPR 4 have with a "moderate" potential to occur, including the Plummer's mariposa-lily (*Calochortus plummerae),* Peirson's morning-glory (*Calystegia peirsonii),* Palmer's grapplinghook (*Harpagonella palmeri)*, and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii).* These four species do not warrant evaluation as a special status species under CEQA, and are not discussed further in this report.

A compendium of plant species observed during the field survey is included in Attachment 3.

DISCUSSION

As noted above, during the 2015 updated botanical survey, no species listed as rare, threatened, or endangered under CESA or FESA were found. No special status species under CEQA were detected, but the slender mariposa-lily has the potential to occur.

Since not all special status plants are identifiable or in full bloom every year, small local populations that may exist as part of the seed bank may nonetheless be present. The slender mariposa-lily has a moderate potential to occur. Two recommended mitigation measures include:

1. Pre-construction spring/summer surveys prior to development in suitable habitat for special status plant species.
2. If special status plant species are detected, a Special Status Plant Species Mitigation Plan must be developed and executed.

These mitigations are only recommended if ground disturbance is delayed more than two years (i.e., beyond the 2017 blooming season), otherwise the current rare plant survey is sufficient.

These mitigation measures requiring pre-construction surveys and mitigation plans should be incorporated into the environmental document prepared for the proposed project.

CONCLUSION

During the 2015 rare plant surveys, no species listed as rare, threatened, or endangered under CESA or FESA were found at the project site. No CEQA special status, or other rare, plants were detected onsite during 2015 surveys. All plant species found on-site were documented and a comprehensive floral compendium

was prepared (Attachment 3). No special status or rare plant mitigations are recommended.

Thank you for the opportunity to assist you on this project. If you have any questions regarding our analysis or would like to discuss the findings, please contact Holly Harris at (805) 644-4455 or hharris@rinconconsultants.com.

Sincerely,
RINCON CONSULTANTS, INC.

Holly Harris
Biologist/Project Manager

Lacrissa Davis
Principal Biologist

Attachments:
Attachment 1: Figure 1, Regional Location, Figure 2, Project Location, Figure 3, Soils, Figure 4, Vegetation.
Attachment 2: CNDDB and CNPS Database Query Results and Potential to Occur
Attachment 3: Plant Species Compendium
Attachment 4: Photographs

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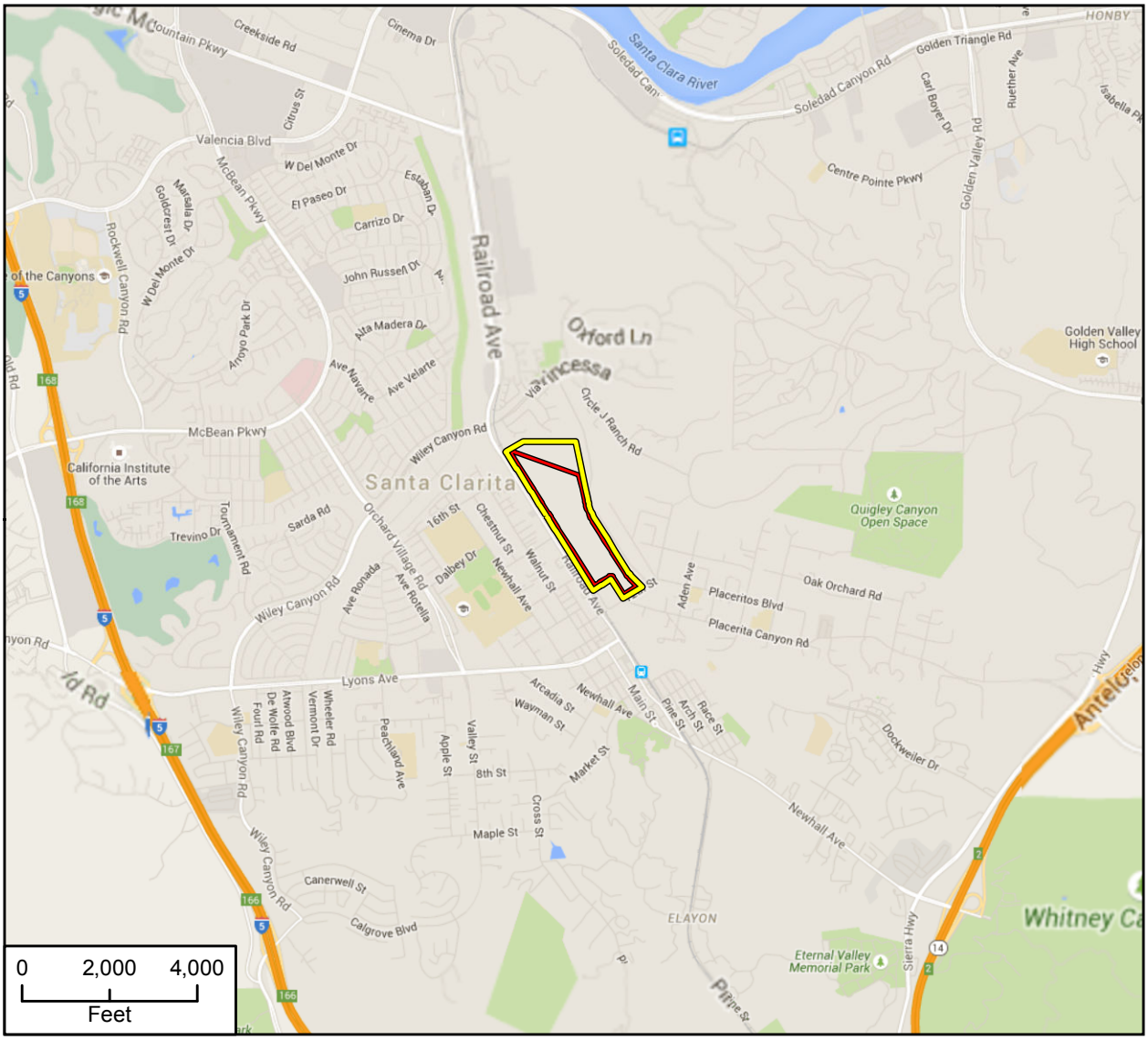

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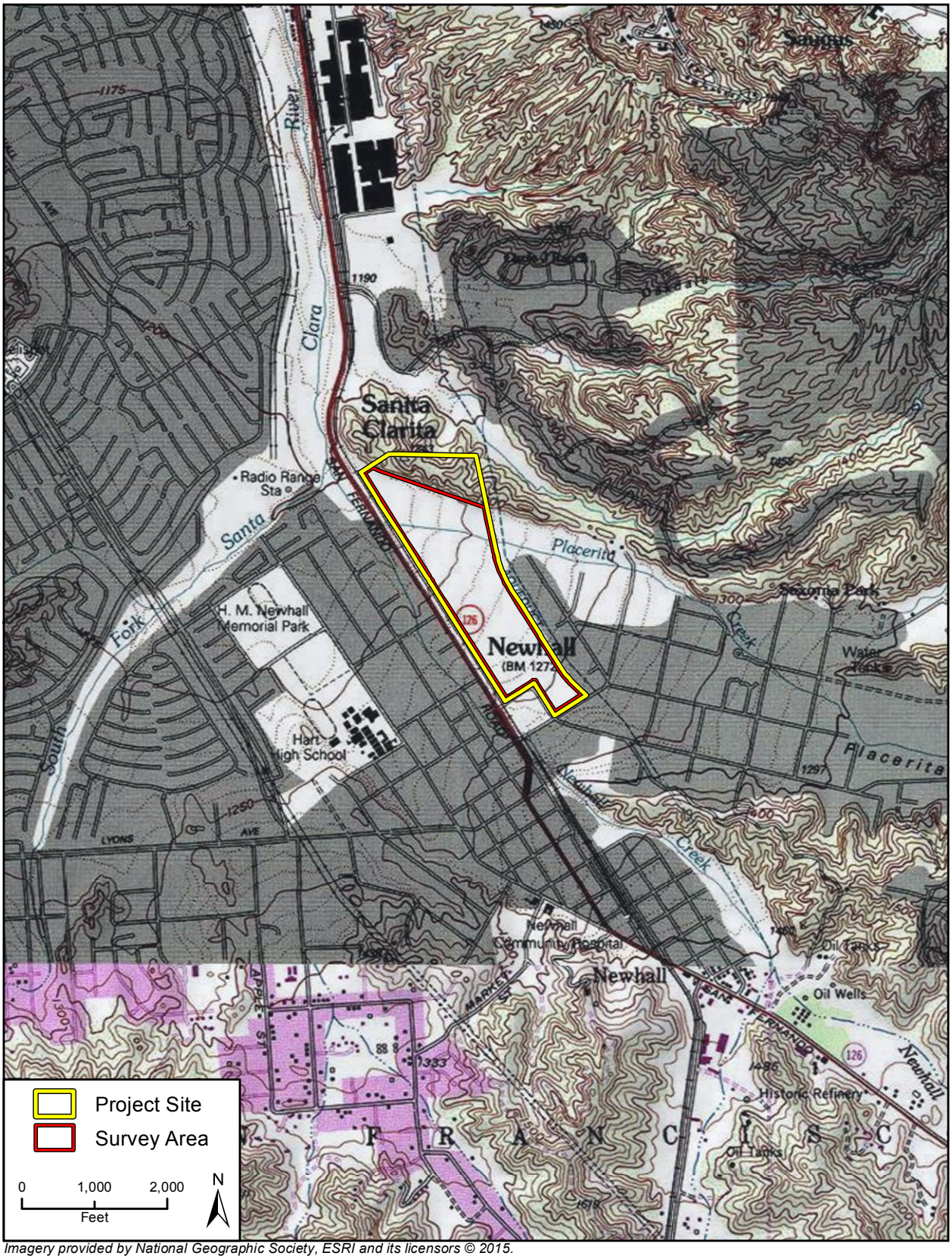
Project Site

Survey Area

Regional Location of Project Site

Figure 1



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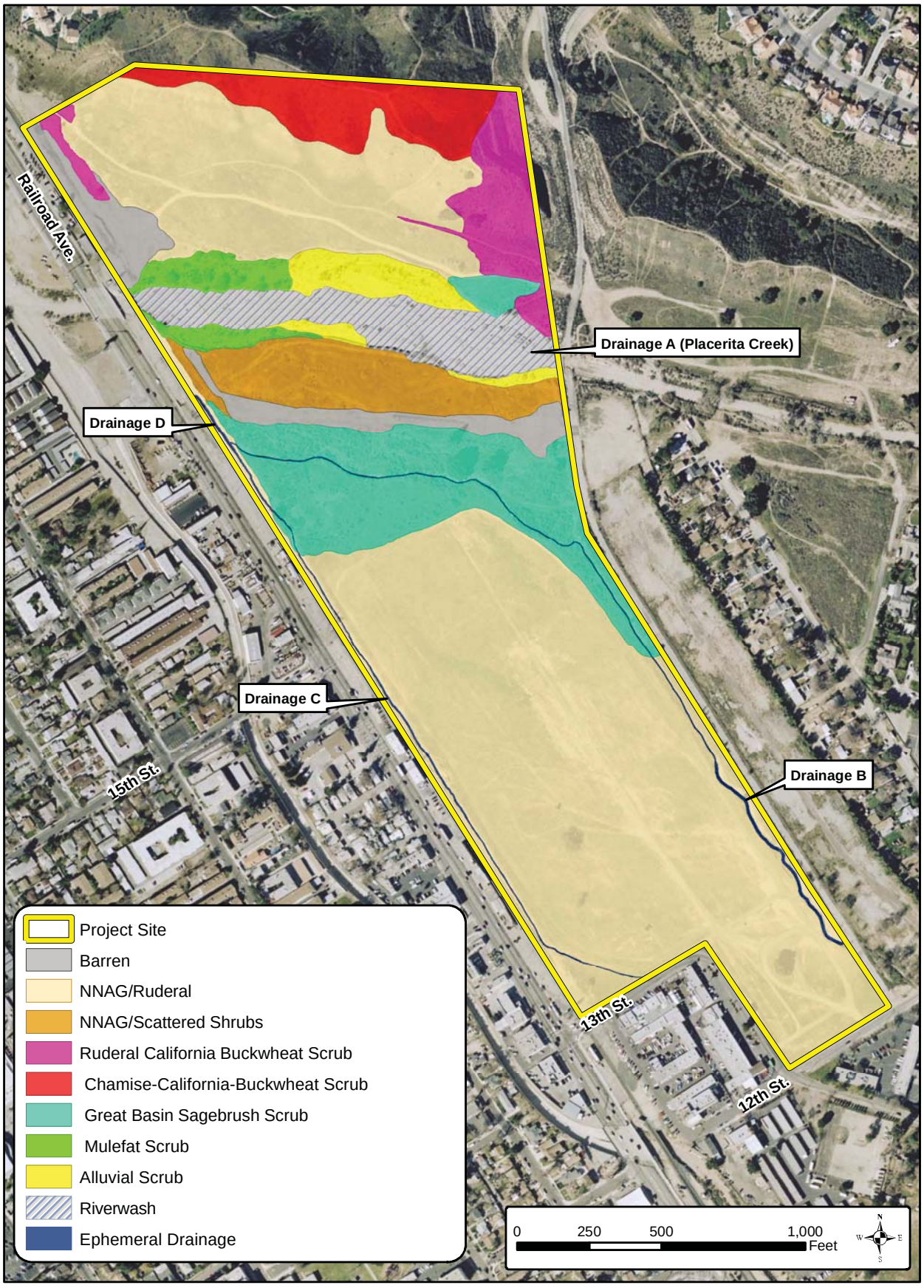
Project boundary from Jensen Design & Survey, February 19, 2015.

Project Location on USGS Topographic Map Figure 2

Imagery provided by Google and its licensors © 2015. Additional data provided by Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for California, December 17, 2013. Project boundary from Jensen Design & Survey, February 19, 2015.

USDA Soils Map

Figure 3



2009 Vegetation Mapping

Source: Christopher A. Joseph & Associates, 2009.

Figure 4

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Allium howellii var. clokeyi Mt. Pinos onion	--/-- 1B.1 G4; S2	Great Basin scrub and pinyon and juniper woodland. 1300-1,850 m. Blooms April-June	Low	Great Basin scrub provides marginally suitable habitat for this species. No project vicinity CNDDB records. Outside elevation range. Not observed during 2005, 2009, and 2015 surveys.
Astragalus brauntonii Braunton's milk-vetch	FE/-- 1B.1 G2; S2	Perennial herb. Blooms Jan-Aug. Closed-cone coniferous forest, chaparral, coast scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in Ca, Mg, with some K. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200-650m (655-2130ft).	Low	Disturbance within the project boundaries creates a low potential for this species to occur. Flat topography not suitable. No project vicinity CNDDB records. Not observed during surveys.
Berberis nevinii Nevin's barberry	FE / SE 1B.1 G1/S1	Perennial evergreen shrub. Blooms Mar-Jun. Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes. 290-1575m (950-5165ft).	Low	Marginally suitable disturbed riparian and coastal scrub habitat present on-site. Not observed during surveys.
California macrophylla Round-leaved filaree	-- / -- 1B.1 G2 / S2	Annual herb. Blooms Mar-May. Cismontane woodland, valley and foothill grassland. Clay soils. 15-1200m (50-3935ft).	Low	Disturbed grasslands present on-site provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Calochortus catalinae Catalina mariposa-Lily	-- / -- 4.2 G3 / S3.2	Perennial bulbiferous herb. Blooms Feb-Jun. Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 30-700m (100-2295ft).	Present	Detected in 2009 (CAJA, 2009). Not observed during 2015 surveys.
Calochortus clavatus var. *clavatus* Club-haired mariposa-lily	-- / -- 4.3 G4T3 / S3	Perennial bulbiferous herb. Blooms May-Jun. Chaparral, cismontane woodland, valley and foothill grassland. Generally on serpentine, clay, rocky soils. 75-1300m (245-4265ft).	Low	Disturbed grasslands present on-site provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Calochortus clavatus var. *gracilis* Slender mariposa-lily	--/ -- 1B.2 G4T2/S2	Perennial bulbiferous herb. Blooms Mar-Jun. Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m (1380-2495ft).	Moderate	Disturbed coastal scrub and grasslands present on-site provide marginally suitable habitat for this species. Shaded canyons are not present onsite. Recent (2010) CNDDB records 0.75 miles to the north. Not observed during surveys.
Calochortus fimbriatus Late-flowered mariposa-lily	-- / -- 1B.2 G3 / S3	Perennial bulbiferous herb. Blooms June-Aug. Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 275-1905 m (900-6250ft).	None	No woodland habitat present. No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Calochortus plummerae Plummer's mariposa-lily	-- / -- 4.2 G4 / S4	Perennial bulbiferous herb. Blooms May-Jul. 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. 100-1700m (330-5575ft).	Moderate	Disturbed grasslands and alluvial material present on-site provide marginally suitable habitat for this species. Not observed during surveys.
Calystegia peirsonii Peirson's morning-glory	-- / -- 4.2 G4 / S4	Perennial rhizomatous herb. Blooms Apr-Jun. Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest. Often in disturbed areas or along roadsides or in grassy, open areas. 390-1470m (1280-4825ft).	Moderate	Disturbed grassy open areas or disturbed coastal scrub outside the survey area may provide moderately suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys
Canbya candida white pygmy-poppy	-- / -- 4.2 G3G4 / S3S4	Annual herb. Blooms Mar-Jun. Joshua tree woodlands, Mojavean desert scrub, pinyon and juniper woodland. Sandy soils. 600–1350m (1968-4430ft).	None	Joshua tree woodlands, desert scrub or pinyon and juniper woodlands do not occur at the project site. No project vicinity CNDDB records. Not observed during surveys.
Centromadia parryi ssp. *australis* Southern tarplant	-- / -- 1B.1 G3T2 / S2	Annual herb. Blooms May-Nov. Marshes and swamps (margins). Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-425m (0-1395ft).	Low	This species in not expected to occur. Marshes or swamps with saline or alkaline soils are not present at the project site. The site is substantially inland from the coast. No project vicinity CNDDB records. Not observed during surveys.
Cercocarpus betuloides var. *blancheae* Island mountain-mahogany	-- / -- 4.3 G5T4 /S4	Perennial evergreen shrub. Blooms Feb-May. Chaparral. 40-600m (130-1970ft).	None	Chaparral habitat not present,. No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC / SE 1B.1 G2T1 / S1	Annual herb. Blooms Apr-Jul. Coastal scrub. Sandy soils. 3-1035m (10-3395ft).	Low	Disturbed coastal sage scrub and sandy loamy soils on site provides marginally suitable habitat for this species. Not observed during surveys.
Convolvulus simulans Small-flowered morning-glory	-- / -- 4.2 G4 / S4	Annual herb. Mar-Jul. Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges. 30-700m (100-2295ft).	Low	This species is not expected to occur. Wet clays and serpentine soils do not occur at the project site. No project vicinity CNDDB records. Not observed during surveys.
Deinandra minthornii Santa Susana tarplant	-- / SR 1B.2 G2 / S2	Perennial deciduous shrub. Blooms Jul-Nov. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760m (1920-2495ft).	Low	Disturbed Coastal sage scrub on site provides marginally suitable habitat for this species. Project site lacks sandstone outcrops. No project vicinity CNDDB records. All species of the genus were identified. Species not observed during surveys.
Deinandra paniculata paniculate tarplant	-- / -- 4.2 G4 / S4	Annual herb. Blooms April-Nov. Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in sandy dune areas. 25-940m (80-3085ft).	Low	This species is not expected to occur. Vernally mesic sites, pools or sandy dunes do not occur at the project site. No project vicinity CNDDB records. Not observed during surveys.
Delphinium parryi ssp. *purpureum* Mt. Pinos larkspur	-- / -- 4.3 G4T3 / S3.3	Perennial herb. Blooms May-Jun. Pinyon-juniper woodland, Mojavean desert scrub, chaparral. 1000-2600m (3280-8530ft).	None	Mojavean desert scrub or pinyon and juniper woodlands do not occur at the project site. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Dodecahema leptoceras Slender-horned spineflower	FE / SE 1B.1 G1 / S1	Annual herb. Blooms Apr-Jun. Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; assoc. include *Encelia, Dalea, Lepidospartum*, etc. 200-760m (655-2495ft).	Low	Alluvial scrub and coastal sage scrub provides moderately suitable habitat for this species. Not observed during surveys.
Dudleya multicaulis Many-stemmed dudleya	-- / -- 1B.2 G2 / S2	Perennial herb. Blooms Apr-Jul. Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 0-790m (0-2590ft).	Low	Coastal sage scrub and grasslands on site provide moderately suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Galium grande San Gabriel bedstraw	-- / -- 1B.2 G2 / S2	Perennial herb. Blooms Apr-Jul. Chaparral, Foothill Woodland, Yellow Pine Forest, Mixed Evergreen Forest. San Gabriel Mountains. 425-1220m (1394-4002ft)	None	Project site is outside the known range of the species. No project vicinity CNDDB records. Not observed during surveys
Harpagonella palmeri Palmer's grapplinghook	-- / -- 4.2 G4 / S3	Annual herb. Blooms Mar-May. Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas w/in shrubland. 15-830m (50-2725ft).	Moderate	Coastal sage scrub and grasslands on site provide moderately suitable habitat for this species. Clay soils generally not present onsite; however recent project vicinity CCH records present in sandy loam. Not observed during surveys.
Helianthus inexpectatus Newhall sunflower	-- / -- 1.B.1 G1 / S1	Perennial rhizomatous herb. Blooms Aug-Oct. Marshes and swamps, riparian woodland, seeps. 350m (1148ft).	None	Marshes, swamps or seeps do not occur on site. No project vicinity CNDDB records. Not observed during surveys.
Helianthus nuttallii ssp. *Parishii* *Los Angeles sunflower*	-- / -- 1A G5TH / SH	Perennial rhizomatous herb. Marshes and swamps (coastal salt and freshwater). Historical from Southern California. 5-1675m (15-5495ft).	None	No suitable habitat present onsite, No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Hordeum intercedens Vernal barley	-- / -- 3.2 G3G4 / S3S4	Annual herb. Blooms Mar-Jun. Valley and foothill grassland, vernal pools. Vernal pools, dry, saline streambeds, alkaline flats. 10-1000m (30-3280ft).	None	Vernal pools, saline streambeds or alkaline flats do not occur at the project site. No project vicinity CNDDB records. Not observed during surveys.
Hulsea vestita ssp. *parryi* Parry's sunflower	-- / -- 4.3 G5T4 / S4	Perennial herb. Blooms Apr-Aug. Lower montane coniferous forest, upper montane coniferous forest, pinyon and juniper woodland. Rocky sites; limestone or granite; sagebrush to fir forest. 1370-2895m. (4494-9498ft).	None	Montane coniferous forests do not occur on site. No project vicinity CNDDB records. Not observed during surveys.
Juglans californica Southern California black walnut	-- / -- 4.2 G3 / S3	Perennial deciduous tree. Blooms Mar-Aug. Chaparral, coastal scrub, cismontane woodland. 50-900m (165-2950ft).	Present	Species has previously been identified within the project boundaries, but was not observed during 2015 surveys.
Lepechinia fragrans Fragrant pitcher sage	-- / -- 4.2 G3 / S3	Perennial shrub. Blooms Mar-Oct. Chaparral. 20-1310m (65-4300ft).	Low	Chaparral habitat generally not present onsite. No project vicinity CNDDB records. Not observed during surveys.
Lepechinia rossii Ross' pitcher sage	-- / -- 1B.2 G1 / S1	Perennial shrub. Blooms May-Sep. Chaparral. Soil derived from fine-grained, reddish sedimentary rock. 305-790m (1000-2590ft).	None	Chaparral habitat generally not present onsite. Fine grained reddish sedimentary rock not present. No project vicinity CNDDB records. Not observed during surveys.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	-- / -- 4.3 G5T3 / S3	Annual herb. Blooms Jan-Jul. Chaparral, coastal scrub. Dry soils, shrubland. 1-885m (3-2905ft).	Moderate	Coastal scrub and dry soils on site provide moderately suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Lilium humboldtii ssp. *ocellatum* Ocellated humboldt lily	-- / -- 4.2 G4T3 / S3	Perennial bulbiferous herb. Blooms Mar-Aug. Chaparral, cismontane woodland, lower montane coniferous forest, riparian forest. Yellow-pine forest or openings, oak canyons. 30-1800m (100-5905ft).	None	No forests are woodlands are present. No project vicinity CNDDB records. Not observed during surveys.
Malacothamnus davidsonii Davidson's bush-mallow	-- / -- 1B.2 G2 / S2	Perennial deciduous shrub. Blooms Jun-Jan. Coastal scrub, riparian woodland, chaparral, cismontane woodland. Sandy washes. 185-855m (605-2805ft).	Low	Coastal sage scrub and washes on-site provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Monardella hypoleuca ssp. *hypoleuca* White-veined monardella	-- / -- 1B.3 G4T2T3 / S2S3	Herb. Blooms Apr-Dec. Chaparral, cismontane woodland. Dry slopes. 50-1525m (165-5005ft).	Low	The species is not expected to occur. However, coast live oak woodlands and chaparral do provide low suitability habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Navarretia fossalis Spreading navarretia	FT / -- 1B.1 G1 / S1	Annual herb. Blooms Apr-Jun. Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and V.P's, often surr. by other habitat types. 30-665m (100-2180ft).	None	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools do not occur at the project site. No project vicinity CNDDB records. Not observed during surveys.
Navarretia ojaiensis Ojai navarretia	-- / -- 1B.1 G1 / S1	Annual herb. Blooms May-Jul. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. 275-620m (900-2035ft).	Low	Coastal sage scrub and grasslands on-site provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Navarretia setiloba Piute Mountains navarretia	-- / -- 1B.1 G2 / S2	Annual herb. Blooms Apr-Jul. Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Generally on clay soils or gravelly loam. 285-2100m (935-6900ft).	Low	Disturbed grasslands on site provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Nolina cismontana Chaparral nolina	-- / -- 1B.2 G2 / S2	Perennial evergreen shrub. Blooms Mar-Jul. Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. 140-1275m (460-4185ft).	Low	Disturbed coastal scrub provide marginally suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.
Opuntia basilaris var. *brachyclada* Short-joint beavertail	-- / -- 1B.2 G5T3 / S3	Perennial stem succulent. Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland, and riparian woodland. Sandy soil or coarse, granitic loam. 425-1800m (1395-5905ft).	Low	This species is not expected to occur. Joshua tree woodlands, desert scrub or pinyon and juniper woodlands do not occur at the project site. Nearby (within 2 miles) 1985 CNDDB records may have been misidentified. Not observed during surveys.
Orcuttia californica California Orcutt grass	FE / SE 1B.1 G1 / S1	Annual herb. Blooms Apr-Aug. Vernal pools. 15-660m (50-660ft).	None	Vernal Pools are not present at the project site. Not observed during surveys.
Phacelia hubbyi Hubby's phacelia	-- / -- 4.2 G4 / S4	Annual herb. Blooms Apr-Jun. Chaparral, coastal scrub, valley and foothill grassland. Gravelly, rocky areas and talus slopes. 0-1000m (0-3280ft).	Low	Disturbed coastal sage scrub and grasslands on-site provide moderately suitable habitat for this species. No project vicinity CNDDB records, most CCH records historical. Not observed during surveys.

Attachment 2. Special Status and Rare Plant Species Potentially Occurring on the Project Site

Scientific Name **Common Name**	**Status Fed/State ESA CRPR G-Rank/S-Rank**	**Habitat Requirements**	**Potential for Occurrence**	**Basis for Determination**
Phacelia mohavensis Mojave phacelia	-- / -- 4.3 G4Q / S4	Annual herb. Blooms Apr-Aug. Cismontane woodland, lower montane coniferous forest, dry meadows, pinyon-juniper woodland. Sandy or gravelly soils, dry streambeds. 1400-2500m (4593-8200ft).	None	Project site is outside the know elevation range for this species. No project vicinity CNDDB records. Not observed during surveys.
Senecio aphanactis Chaparral ragwort	-- / -- 2B.2 G3? / S2	Annual herb. Blooms Jan-Apr. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 15-800m (50-2625ft).	Low	Disturbed coastal sage scrub and grasslands on-site provide marginally suitable habitat for this species. Historic (1901) non-specific CNDDB record. Not observed during surveys.
Symphyotrichum greatae Greata's aster	-- / -- 1B.3 G3 / S3	Perennial rhizomatous herb. Blooms Jun-Oct. Chaparral, cismontane woodland. Mesic canyons. 800-1500m (2625-4920ft).	None	The project site does not contain suitable habitat for this species. No project vicinity CNDDB records. Not observed during surveys.

Status
FE = Federally Endangered FT = Federally Threatened
SE = State Endangered ST = State Threatened SR = State Rare
CRPR (CNPS California Rare Plant Rank):
1A=Presumed Extinct in California
1B=Rare, Threatened, or Endangered in California and elsewhere
2=Rare, Threatened, or Endangered in California, but more common elsewhere
3=Need more information (a Review List)
4=Plants of Limited Distribution (a Watch List)
CRPR Threat Code Extension:
.1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2=Fairly endangered in California (20-80% occurrences threatened)
.3=Not very endangered in California (<20% of occurrences threatened)
G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind 5.

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Attachment 3. Floral Compendium: 2015 Survey Results

Family	*Scientific Name*	Common Name	Origin[1]
ADOXACEAE	*Sambucus nigra* ssp. *caerulea*	blue elderberry	Native
AMARANTHACEA	*Amaranthus albus*	prostrate pigweed	Native
AMARANTHACEA	*Chenopodium berlandieri*	pitseed goosefoot	Native
ANACARDIACEAE	*Schinus molle*	pepper tree	Introduced; Cal-IPC - Limited
APOCYNACEAE	*Asclepius eriocarpa*	Indian milkweed	Native
APOCYNACEAE	*Asclepias fascicularis*	narrow-leaf milkweed	Native
APOCYNACEAE	*Nerium oleander*	common oleander	Introduced
ARECACEAE	*Washingtonia robusta*	Mexican fan palm	Introduced; Cal-IPC - Moderate
ASTERACEAE	*Ambrosia acanthicarpa*	annual bur-sage	Native
ASTERACEAE	*Artemisia californica*	California sagebrush	Native
ASTERACEAE	*Artemisia douglasiana*	Mugwort	Native
ASTERACEAE	*Artemisia dracunculus*	Tarragon	Native
ASTERACEAE	*Artemisia tridentata*	big sagebrush	Native
ASTERACEAE	*Baccharis salicifolia* ssp. *salicifolia*	mule fat	Native
ASTERACEAE	*Brickellia californica*	California Brickelbush	Native
ASTERACEAE	*Carduus pycnocephalus*	Italian thistle	Introduced; Cal-IPC - Moderate
ASTERACEAE	*Centaurea benidicta*	blessed thishtle	Introduced
ASTERACEAE	*Centaurea melitensis*	tocalote	Introduced; Cal-IPC - Moderate
ASTERACEAE	*Chaenactis glabriuscula* var. *glabriuscula*	yellow pincushion	Native
ASTERACEAE	*Corethrogyne filaginifolia*	California-aster	Native
ASTERACEAE	*Deinandra fasciculata*	tarplant	Native
ASTERACEAE	*Dimorphotheca sinuata*	Namaqualand daisy	Introduced
ASTERACEAE	*Erigeron canadensis*	horseweed	Native
ASTERACEAE	*Ericameria palmeri var. pachylepis*	Palmer goldweed	Native
ASTERACEAE	*Eriophyllum confertiflorum*	golden yarrow	Native
ASTERACEAE	*Hedypnois cretica*	crete weed	Introduced
ASTERACEAE	*Helianthus annuus*	sunflower	Native
ASTERACEAE	*Heterotheca grandiflora*	telegraph weed	Native
ASTERACEAE	*Heterotheca sessiliflora* var. *echioides*	goldenaster	Native
ASTERACEAE	*Isocoma menzeisii*	coastal goldenbush	Native
ASTERACEAE	*Lactuca serriola*	prickly lettuce	Introduced
ASTERACEAE	*Lasthenia gracilis*	common goldfields	Native
ASTERACEAE	*Lepidospartum squamatum*	scale-broom	Native
ASTERACEAE	*Logfia filaginoides*	California cottonrose	Native
ASTERACEAE	*Logfia gallica*	daggerleaf cottonrose	Introduced
ASTERACEAE	*Malacothrix glabrata*	desert dandelion	Native
ASTERACEAE	*Matricaria discoidea*	pineapple weed	Native
ASTERACEAE	*Pseudognaphalium californicum*	California everlasting	Native

Family	*Scientific Name*	Common Name	Origin[1]
ASTERACEAE	*Senecio flaccidus*	threadleaf ragwort	Native
ASTERACEAE	*Sonchus oleraceus*	common sow thistle	Introduced
ASTERACEAE	*Stephanomeria exigua*	small wirelettuce	Native
ASTERACEAE	*Stephanomeria pauciflora*	wire-lettuce	Native
ASTERACEAE	*Stephanomaria virgata*	rod wire-lettuce	Native
ASTERACEAE	*Tetrademia comosa*	cottonthorn	Native
ASTERACEAE	*Uropappus lindleyi*	Silverpuffs	Native
BORAGINACEAE	*Amsinckia intermedia*	fiddleneck; fireweed	Native
BORAGINACEAE	*Amsinckia menziesii*	small-flowered fiddleneck	Native
BORAGINACEAE	*Cryptantha intermedia*	cryptantha	Native
BORAGINACEAE	*Emmenanthe penduliflora*	whispering bells	Native
BORAGINACEAE	*Eriodictyon crassifolium* var. *crassifolium*	Thick-leaved yerba santa	Native
BORAGINACEAE	*Eucrypta chrysanthemifolia* var. *chrysanthemifolia*	Eucryta	Native
BORAGINACEAE	*Heliotropum curassavicum* var. *oculatum*	alkali heliotrope	Native
BORAGINACEAE	*Pectocarya linearis* ssp. *ferocula*	narrow-toothed pectocarya	Native
BORAGINACEAE	*Phacelia cicutaria* var. *hispida*	caterpiller phacelia	Native
BORAGINACEAE	*Phacelia distans*	common phacelia	Native
BORAGINACEAE	*Phacelia ramosissima*	branching phacelia	Native
BORAGINACEAE	*Plagiobothrys canescens* var. *catalinenis*	Santa Catalina popcornflower	Native
BRASSICACEAE	*Hirschfeldia incana*	perennial mustard	Introduced; Cal-IPC - Moderate
BRASSICACEAE	*Sisymbrium altissimum*	tumble mustard	Introduced
BRASSICACEAE	*Sisymbrium irio*	London rocket	Introduced; Cal-IPC - Moderate
BRASSICACEAE	*Sisymbrium orientale*	hedge mustard	Introduced
CACTACEAE	*Opuntia basilaris* var. *basilaris*	bevertail	Native
CARYOPHYLLACEAE	*Spurgularia sp.*	sand-purry	
CARYOPHYLLACEAE	*Stellaria media*	chickweed	Introduced
CHENOPODIACEAE	*Atriplex* sp.		
CHENOPODIACEAE	*Chenopodium album*	lamb's quarters	Introduced
CHENOPODIACEAE	*Chenopodium murale*	nettle leaf goosefoot	Introduces
CHENOPODIACEAE	*Salsola tragus*	Russian thistle	Introduced; Cal-IPC - Limited
CONVOLVULACEAE	*Cuscuta californica*	chaparral dodder	Native
CRASSULACEAE	*Crassula connata*	pygmyweed	Native
CUCURBITACEAE	*Cucurbita foetidissima*	buffalo gourd	Native
CUCURBITACEAE	*Marah macrocarpa*	Chilicothe	Native
EUPHORBIACEAE	*Croton californicus*	croton	Native
EUPHORBIACEAE	*Croton setiger*	turkey-mullen	Native
EUPHORBIACEAE	*Euphorbia albomarginata*	rattlesnake sandmat	native
FABACEAE	*Acmispon americanus* var. *americanus*	Spanish clover	Native

Family	*Scientific Name*	Common Name	Origin[1]
FABACEAE	*Acmispon glaber*	deerweed	Native
FABACEAE	*Acmispon strigosus*	strigose lotus	Native
FABACEAE	*Albizia julibrissin*	silk tree	Planted
FABACEAE	*Astragalus filipes*	balslt milkventch	Native
FABACEAE	*Astragalus pomonensis*	Pomona milkvetch	Native
FABACEAE	*Astragalus trichopes var. phoxus*	Santa Barbara milk vetch	Native
FABACEAE	*Lupinus bicolor*	miniature lupine	Native
FABACEAE	*Lupinus hirsutissimus*	stinging lupine	Native
FABACEAE	*Lupinus concinnus*	bajada lupine	Native
FABACEAE	*Medicago polymorpha*	bur clover	Introduced; Cal-IPC - Limited
FABACEAE	*Melilotus indicus*	sweet clover	Introduced
FABACEAE	*Robinia pseudoacacia*	black locust	Introduced; Cal-IPC - Limited
FABACEAE	*Trifolium gracilentum*	pinpoint clover	Native
FAGACEAE	*Quercus agrifolia* var. *agrifolia*	coast live oak	Native
FAGACEAE	*Quercus lobata*	valley oak	Native
GERANIACEAE	*Erodium cicutarium*	redstem filaree	Introduced; Cal-IPC - Limited
GERANIACEAE	*Erodium moschatum*	filaree	Introduced
GROSSULARIACEAE	*Ribes malvaceum* var. *viridifolium*	chaparral currant	Native
LAMIACEAE	*Lamium amplexicaule*	henbit	Introduced
LAMIACEAE	*Marrubium vulgare*	horehound	Introduced; Cal-IPC - Limited
LAMIACEAE	*Trichostema lanceolatum*	vinegarweed	Native
LAMIACEAE	*Salvia apiana*	white sage	Native
LAMIACEAE	*Salvia columbariae*	chia	Native
LAMIACEAE	*Salvia mellifera*	black sage	Native
LINACEAE	*Linum lewisii* var. *lewisii*	flax	Native
LOASACEAE	*Mentzelia micrantha*	blazing star	Native
MALVACEAE	*Malva parviflora*	cheeseweed	Introduced
MELIACEAE	*Melia azedarach*	China berry	Inroduced
OLEACEAE	*Fraxinus uhdei*	Shamel ash	Planted
ONAGRACEAE	*Camissoniopsis bistorta*	California sun cups	Native
ONAGRACEAE	*Camissoniopsis pallida*	pale yellow sun cups	Native
ONAGRACEAE	*Clarkia purpurea* ssp. *quadrivulnera*	farewell to spring	Native
ONAGRACEAE	*Epilobium canum*	California fuchsia	Native
ONAGRACEAE	*Eulobus californicus*	California suncup	Native
OROBANCHACEAE	*Castilleja exserta* ssp. *exserta*	owl's clover	Native
PAPAVERACEAE	*Eschscholzia californica*	California poppy	Native
PAPAVERACEAE	*Eschscholzia minutiflora*	pygmy poppy	Native
PHRYMACEAE	*Mimulus aurantiacus*	bush monkey flower	Native
PLANTAGINACEAE	*Plantago lanceolata*	English plantain	Introduced
PLANTANACEAE	*Platanus xhispanica*	western plain tree	Planted

Family	*Scientific Name*	Common Name	Origin[1]
POACEAE	*Arundo donax*	giant reed	Introduced; Cal-IPC - High
POACEAE	*Avena barbata*	slender oat	Introduced; Cal-IPC - Moderate
POACEAE	*Avena fatua*	wild oat	Introduced; Cal-IPC - Moderate
POACEAE	*Bromus carinatus* var. *carinatus*	California brome	Native
POACEAE	*Bromus diandrus*	ripgut brome	Introduced; Cal-IPC - Moderate
POACEAE	*Bromus hordeaceus*	soft chess	Introduced; Cal-IPC - Limited
POACEAE	*Bromus madritensis* ssp. *rubens*	red brome	Introduced; Cal-IPC - High
POACEAE	*Bromus tectorum*	cheat grass	Introduced; Cal-IPC - High
POACEAE	*Festuca myuros*	rattail fescue	Introduced; Cal-IPC - Moderate
POACEAE	*Hordeum murinum* ssp. *leporinum*	hare barley	Introduced; Cal-IPC - Moderate
POACEAE	*Schismus barbatus*	Mediterranean grass	Introduced; Cal-IPC - Limited
POACEAE	*Stipa miliacea* var. *miliacea*	smilo grass	Introduced; Cal-IPC - Limited
POACEAE	*Triticum aestivum*	wheat	Introduced
POLEMONIACEAE	*Eriastrum densifolium*	shrubby eriastrum	Native
POLYGONACEAE	*Eriogonum angulosum*	angled stem buckwheat	Native
POLYGONACEAE	*Eriogonum elongatum* var. *elongatum*	long-stem buckwheat	Native
POLYGONACEAE	*Eriogonum fasciculatum*	California buckwheat	Native
POLYGONACEAE	*Eriogonum gracile*	slender buckwheat	Native
POLYGONACEAE	*Polygonum aviculare*	knotweed	Native
POLYGONACEAE	*Rumex crispus*	curly dock	Introduced; Cal-IPC - Limited
POLYGONACEAE	*Rumex hymenosepalus*	desert rhubarb	Native
ROSACEAE	*Adenostoma fasciculatum* var. *fasciculatum*	chamise	Native
RUBIACEAE	*Galium andrewsii* ssp. *andrewsii*	phlox-leaved bedstraw	Native
SALICACEAE	*Populus fremontii* ssp. *fremontii*	Fremont's cottonwood	Native
SALICACEAE	*Salix exigua*	narrow-leaved willow	Native
SALICACEAE	*Salix lasiolepis*	arroyo willow	Native
SIMAROUBACEAE	*Ailanthus altissima*	tree of heaven	Introduced; Cal-IPC - Moderate
SOLANACEAE	*Datura wrightii*	Jimson weed	Native
SOLANACEAE	*Nicotiana glauca*	tree tobacco	Introduced; Cal-IPC - Moderate
SOLANACEAE	*Nicotiana quadrivalvis*	Indian tobacco	Native
SOLANACEAE	*Solanum xanti*	nightshade	Native
THEMIDACEAE	*Dichelostemma capitatum*	blue-dicks	Native
ULMACEAE	*Ulmus minor*	field elm	Planted
URTICACEAE	*Urtica urens*	dwarf nettle	Introduced
VERBENACEAE	*Verbena lasiostachys*	Common verbena	Native
ZYGOPHYLLACEAE	*Tribulus terrestris*	puncture vine, goat heads	Introduced

[1]*Native to California, Introduced and Naturalized, or Planted.*

[2]*Cal-IPC – California Invasive Plant Council*

[3]*CRPR 4 ranked species*

Attachment 4. Photographs

View toward Railroad Avenue. April 3, 2015

View north towards Placerita Creek. April 3, 2015

View of track on the southeastern corner , May 7, 2015.

Coastal Sage Scrub, NW corner of the project site. May 7, 2015

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Placerita Meadows RPS Report 2020

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003
805 644 4455 OFFICE AND FAX
info@rinconconsultants.com
www.rinconconsultants.com

June 18, 2020
Project No: 19-07757

Christopher Prather
Newhall Development Partners, LLC
PO Box 91821
Santa Barbara, CA 91390
Via email: chris@pratherdevelopment.com

Subject: **Placerita Meadows 2020 Rare Plant Survey**
Santa Clarita, California

Dear Mr. Prather:

Rincon Consultants, Inc. (Rincon) prepared this Rare Plant Survey Report to provide Newhall Development Partners (NDP) with an assessment of the potential impacts to special-status botanical resources associated with implementation of the Placerita Meadows Project (project). This report documents the existing conditions of the project site and evaluates the potential for impacts to special-status plant species. The biological evaluation herein includes the results of a background literature review and floristic survey conducted by Rincon.

Project Location and Description

The proposed project involves development of single-family residential lots, parking, infrastructure, and parklands on an approximately 92-acre undeveloped site (Attachment A; Figure 1). Previous rare plant surveys were conducted for the project in 2015 and 2019. The project area has been expanded to include an area north of Placerita Creek to be used for additional storm water holding capacity in a 100-year flood event (approximately 15 acres). As this additional area was not included in previous rare plant surveys for the project, the City of Santa Clarita required additional rare plant surveys to evaluate the area. For purposes of the 2020 botanical survey, the study area consisted of the additional 15-acre added project area (Attachment A; Figure 2).

Regulatory Background

Local, state, and federal agencies regulate protected plant species, and may require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. Assessments for the potential occurrence of rare plant species are based upon known ranges, habitat preferences for the species, species occurrence records from the California Natural Diversity Database (CNDDB); and species occurrence records from other sites in the vicinity of the project site.

For the purpose of this report, rare plant species are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act (FESA); those listed or candidates for listing as rare, threatened, or endangered by the California

Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA); and those recognized by the CDFW under the California Rare Plant Rank (CRPR) system (Ranks 1 through 4, Table 1; Rank Threat Code Extensions, Table 2).

Table 1 California Rare Plant Rank Definitions

Rank	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 2 California Rare Plant Rank Threat Code Extensions

Threat Rank	Definitions
.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened)

Vegetation communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include special status species, or are particularly susceptible to disturbance. The CDFW ranks natural and sensitive communities using NatureServe's Heritage Methodology (CDFW 2019), the same system used to assign global and state rarity ranks for plant and animal species in the CNDDB. Vegetation communities are considered sensitive if their Global or State rank is 1-3.

Methodology

A literature review and field survey effort were conducted as part of this assessment – each is described below.

Literature Review

Prior to conducting the field survey of the project site, Rincon biologists reviewed recent aerial photography of the project site and consulted the CDFW's CNDDB (CDFW 2020a), California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020), and U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2020) for information on general botanical resources, rare plant species occurrences, and critical habitat designations within a five-mile radius of the project site. Previously prepared botanical reports for the project (Rincon 2015, 2019) were also reviewed.

Nomenclature follows *The Jepson Manual* (Baldwin et al. 2012) and updates available in the online Jepson eFlora (UCB, 2020), with status updates provided in the CDFW *Special Vascular Plants,*

Bryophytes, and Lichens List (CDFW 2020b), the CDFW *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (CDFW 2020c), and the CNPS online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020).

Field Survey

The rare plant surveys were floristic in nature (i.e., all plants encountered were identified to the lowest taxonomic level necessary to determine rarity) and generally followed the *CNPS Botanical Survey Guidelines* (CNPS 2001) and the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). The rare plant surveys were performed by Rincon Senior Botanist Robin Murray and Rincon Botanist Carolyn Welch on March 24 and May 22, 2020 between the hours of 8:00 AM and 2:00 PM. All plant species observed within the study area were recorded (Attachment B, Floral Compendium). Field surveys were scheduled to optimize detection of special status plant species with potential to occur within the study area (Attachment C).

The survey was conducted using systematic field techniques by walking meandering transects through the entire study area. Special attention was given to areas with a high potential to support rare plant species (e.g., vegetation community interfaces, areas with unique soils). Vegetation communities were described and mapped using the CDFW-CNPS Protocol for the Combined Vegetation Rapid Assessment and Relevé Field Form (CNPS 2019). The results of the rare plant survey are discussed below.

Results

No species listed as rare, threatened, or endangered under CESA or FESA, or CEQA special status plants were found within the study area during the 2020 botanical surveys. All plant species observed were documented and a comprehensive floral compendium was prepared (Attachment B). No special status or rare plant mitigations are recommended.

Six vegetation communities were documented within the study area (Attachment A; Figure 3). These vegetation communities are discussed in detail below. Representative site photographs are presented in Attachment D.

Wild Oat Grassland (*Avena* spp. Herbaceous Semi-Natural Alliance)

Wild oat grasslands are found in all topographic settings in foothills, waste places, rangelands, and openings in woodlands between 0-7,215 feet (0-2,200 meters) in elevation. Wild oats (*Avena barbata*, *A. fatua*) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover. This vegetation community is ranked GNASNA and is not considered sensitive (CDFW 2019).

This vegetation community covers the majority of the site and occurs in a large open, flat area and the lower portion of the hills within the central portion of the site. The herbaceous layer is dominated by wild oat (*Avena barbata, A. fatua*), ripgut brome (*Bromus diandrus*), rattail fescue (*Festuca myuros*), and cheat grass (*Bromus tectorum*). Non-native forbs such as perennial mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), horehound (*Marrubium vulgare*), and tocolote (*Centaurea melitensis*) were also commonly observed within this community. This community exhibits evidence of regular human disturbance, as it is traversed by several actively used dirt roads and trails, and supports a homogenous, predominantly nonnative plant species composition and low habitat complexity.

California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)

California buckwheat scrub is typically found along upland sloped, intermittently flooded arroyos, channels and washes, and rarely within flooded low-gradient deposits, between 0-3,940 feet (0-1,200 meters) in elevation. Soils are typically course, well drained, and moderately acidic to slightly saline. California buckwheat (*Eriogonum fasciculatum*) contributes to at least 50% relative cover in the shrub layer. This vegetation community is ranked G5S5 and is not considered sensitive (CDFW 2019).

This vegetation community is found along the western border of the study area. California buckwheat is dominant in the open shrub layer, with California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*) present as subdominant species. The herbaceous layer is dominated by wild oats, black mustard, and cheatgrass.

Chamise-California Buckwheat Scrub (*Adenostoma fasciculata-Eriogonum fasciculatum* Shrubland Association)

Chamise-California buckwheat scrub is found within varied topography, typically within shallow soils over colluvium and many kinds of bedrock, between 30-5,900 feet (10-1,800 meters) in elevation. Chamise (*Adenostoma fasciculata*) and California buckwheat comprise at least 50% cover in the shrub layer. This vegetation community is ranked G4S4 and is not considered sensitive (CDFW 2019).

This vegetation community is found within the northeastern portion of the study area, on the northeastern-facing slope of a hill. Chamise is dominant in the dense shrub layer, with California buckwheat present as a subdominant species. The herbaceous layer is sparse due to the density of the shrub layer. Commonly encountered herbaceous species include miniature lupine (*Lupinus bicolor*), woodland clarkia (*Clarkia unguiculata*), wishbone bush (*Mirabilis bigelovii*), and death camas (*Toxicoscordion fremontii*).

Big Sagebrush Scrub (*Artemisia tridentata* Shrubland Alliance)

Big sagebrush scrub is typically found within plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, hills, ridges, seasonal and perennial stream channels, and dry washes between 984-9,840 feet (30-3,000 meters) in elevation. Big sagebrush (*Artemisia tridentata*) constitutes at least 2% absolute cover in the shrub layer, with no other single species with greater cover. This vegetation community is ranked G5S5 and is not considered sensitive (CDFW 2019).

This vegetation community is found within the bed and upper banks of Placerita Creek, within the southern portion of the study area. Soils consist of coarse sand. Big sagebrush (*Artemisia tridentata*) is dominant in the open shrub layer, with thickleaf yerba santa (*Eriodictyon crassifolium*), California buckwheat, California sagebrush, and scale broom (*Lepidospartum squamatum*) commonly present. The herbaceous layer is sparse, and dominated by black mustard. This community intergrades with riverwash along the southern boundary of the study area and wild oats annual grassland to the north.

Giant Reed Break (*Arundo donax* Semi-Natural Alliance)

This herbaceous semi-natural alliance is found within riparian areas, along low-gradient streams and ditches, as well as within semi-permanently flooded and slightly brackish marshes and impoundments, from 0-1,600 meters in elevation. Giant reed (*Arundo donax*) dominates the herbaceous layer. Giant reed is provided a rating of high by the California Invasive Plant Council (Cal-IPC 2020), indicating that the species has severe ecological impacts on physical processes, plant and animal communities, and

vegetation structure. Its reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. This vegetation community is ranked GNASNA and is not considered sensitive (CDFW 2019).

This vegetation community is found within Placerita Creek within the southwestern portion of the study area, adjacent to big sagebrush scrub and wild oat grassland. The dominant species is giant reed, which forms a dense herbaceous layer to the exclusion of all other species.

Riverwash

This community is located within an open, unvegetated or sparsely vegetated channel of Placerita Creek that is maintained by scouring from intermittent stream flows. The substrate is comprised of gravel, cobble, sand, and scattered woody debris in the main channel, with finer silty soils and sparse annual grass and shrub cover on lower terraces. Commonly encountered plant species include native shrubs such as scale broom, mulefat (*Artemisia douglasii*), and Palmer's goldenbush (Isocoma , as well as a variety of herbaceous species, such as annual burweed (*Ambrosia acanthicarpa*) and telegraph weed (*Heterotheca grandiflora*), and tree tobacco (*Nicotiana glauca*) and tree of heaven (*Ailanthus altissima*); however, these species appear to be temporary inhabitants that do not persist for long periods due to annual flooding episodes. River wash is a naturally dynamic habitat and may shift and change position within drainages, depending on flood volumes and regularity.

Rincon appreciates the continued opportunity to support the Placerita Meadows Project. Please do not hesitate in reaching out to the undersigned with questions related to the contents herein.

Sincerely,
Rincon Consultants, Inc.

Robin Murray
Senior Botanist

Steven J. Hongola
Principal / Senior Ecologist

Attachments

Attachment A	Figures
Attachment B	Floral Compendium
Attachment C	Special Status Plant Species Potential to Occur
Attachment D	Representative Site Photographs

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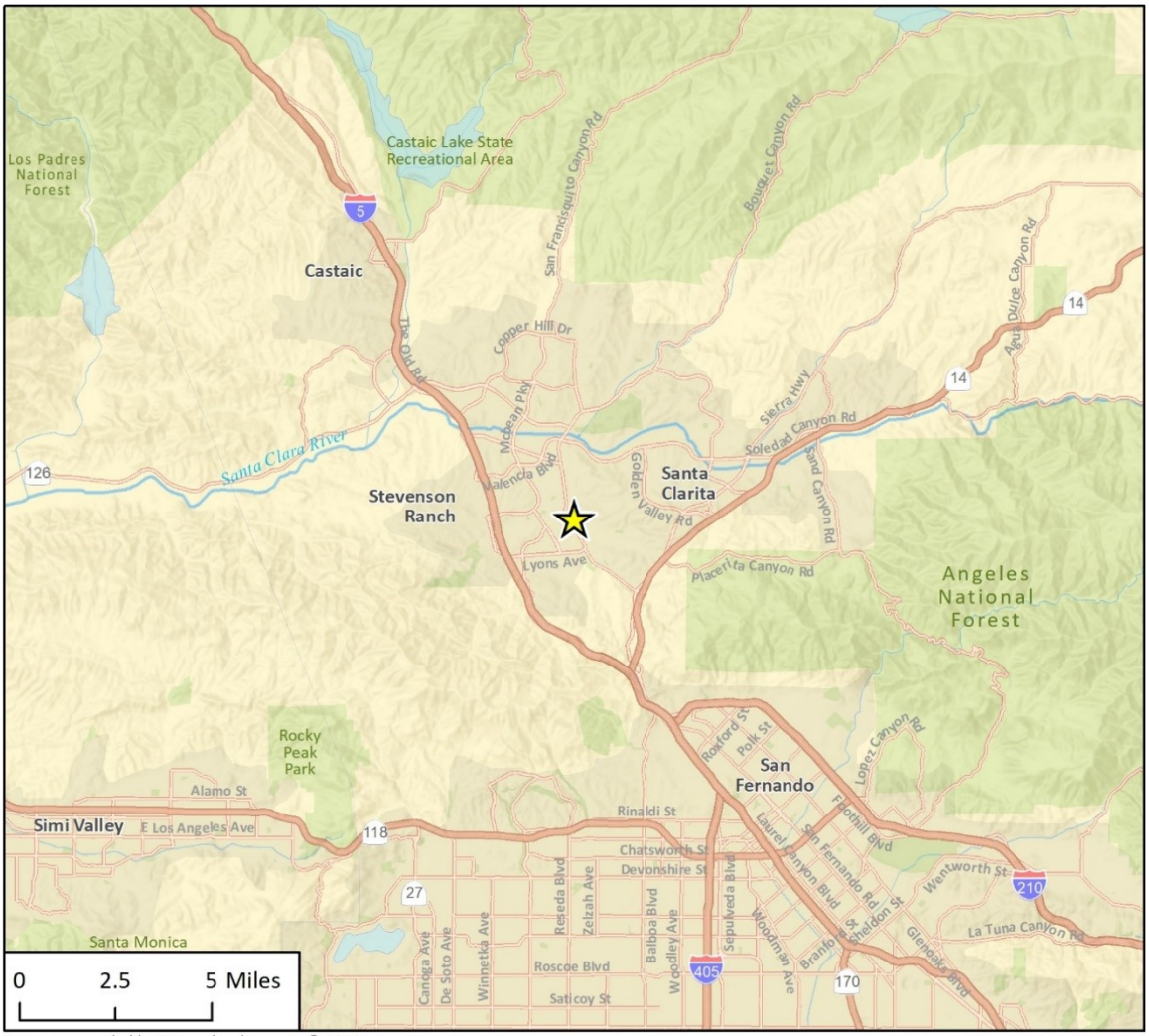
Attachment A

Figures

Figure 1 Regional Vicinity



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Project Location

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Figure 2 Study Area

Imagery provided by Microsoft Bing and its licensors © 2020.

Figure 3 Vegetation Communities

Imagery provided by Microsoft Bing and its licensors © 2020.

Attachment B

Floral Compendium

Scientific Name	Common Name	Origin
Acmispon americanus	Spanish clover	Native
Acmispon glaber	deerweed	Native
Acmispon strigosus	strigose lotus	Native
Adenostoma fasciculatum	chamise	Native
Ailanthus altissima	tree of heaven	Introduced, Cal-IPC - Moderate
Amaranthus albus	prostrate pigweed	Native
Ambrosia acanthicarpa	annual bur-sage	Native
Amsinckia intermedia	fiddleneck; fireweed	Native
Amsinckia menziesii	small-flowered fiddleneck	Native
Artemisia californica	California sagebrush	Native
Artemisia douglasiana	mugwort	Native
Artemisia dracunculus	tarragon	Native
Artemisia tridentata	big sagebrush	Native
Arundo donax	giant reed	Introduced; Cal-IPC - High
Asclepias fascicularis	narrow-leaf milkweed	Native
Asclepius eriocarpa	Indian milkweed	Native
Astragalus filipes	balslt milkventch	Native
Astragalus pomonensis	Pomona milkvetch	Native
Astragalus trichopes var. *phoxus*	Santa Barbara milk vetch	Native
Avena barbata	slender oat	Introduced; Cal-IPC - Moderate
Avena fatua	wild oat	Introduced; Cal-IPC - Moderate
Baccharis salicifolia	mule fat	Native
Brickellia californica	California brickelbush	Native
Bromus carinatus var. *carinatus*	California brome	Native
Bromus diandrus	ripgut brome	Introduced; Cal-IPC - Moderate
Bromus hordeaceus	soft chess	Introduced; Cal-IPC - Limited
Bromus rubens	red brome	Introduced; Cal-IPC - High
Bromus tectorum	cheat grass	Introduced; Cal-IPC - High
Camissoniopsis bistorta	California sun cups	Native
Camissoniopsis pallida	pale yellow sun cups	Native
Carduus pycnocephalus	Italian thistle	Introduced; Cal-IPC - Moderate
Castilleja exserta ssp. *exserta*	owl's clover	Native
Centaurea benidicta	blessed thistle	Introduced
Centaurea melitensis	tocalote	Introduced; Cal-IPC - Moderate
Chaenactis glabriuscula var. *glabriuscula*	yellow pincushion	Native
Chenopodium album	lamb's quarters	Introduced
Chenopodium berlandieri	pitseed goosefoot	Native
Chenopodium murale	nettle leaf goosefoot	Introduced

Scientific Name	Common Name	Origin
Clarkia purpurea ssp. *quadrivulnera*	farewell to spring	Native
Clarkia unguiculata	woodland clarkia	Native
Claytonia perfoliata	miner's lettuce	Native
Corethrogyne filaginifolia	California-aster	Native
Crassula connata	pygmyweed	Native
Croton californicus	croton	Native
Croton setiger	turkey-mullein	Native
Cryptantha intermedia	cryptantha	Native
Cucurbita foetidissima	buffalo gourd	Native
Cuscuta californica	chaparral dodder	Native
Datura wrightii	Jimson weed	Native
Deinandra fasciculata	tarplant	Native
Dichelostemma capitatum	blue-dicks	Native
Emmenanthe penduliflora	whispering bells	Native
Epilobium canum	California fuchsia	Native
Eriastrum densifolium	shrubby eriastrum	Native
Ericameria palmeri var. *pachylepis*	Palmer goldweed	Native
Erigeron canadensis	horseweed	Native
Eriodictyon crassifolium	thick-leaved yerba santa	Native
Eriogonum angulosum	angled stem buckwheat	Native
Eriogonum elongatum var. *elongatum*	long-stem buckwheat	Native
Eriogonum cinereum	ashy leaf buckwheat	Native
Eriogonum fasciculatum	California buckwheat	Native
Eriogonum gracile	slender buckwheat	Native
Eriophyllum confertiflorum	golden yarrow	Native
Erodium cicutarium	redstem filaree	Introduced; Cal-IPC - Limited
Erodium moschatum	filaree	Introduced
Eschscholzia californica	California poppy	Native
Eschscholzia minutiflora	pygmy poppy	Native
Eucrypta chrysanthemifolia	eucryta	Native
Eulobus californicus	California suncup	Native
Euphorbia albomarginata	rattlesnake sandmat	native
Festuca myuros	rattail fescue	Introduced; Cal-IPC - Moderate
Galium andrewsii ssp. *andrewsii*	phlox-leaved bedstraw	Native
Hedypnois cretica	crete weed	Introduced
Helianthus annuus	sunflower	Native
Heliotropum curassavicum var. *oculatum*	alkali heliotrope	Native
Heterotheca grandiflora	telegraph weed	Native

Scientific Name	Common Name	Origin
Hirschfeldia incana	perennial mustard	Introduced; Cal-IPC - Moderate
Hordeum murinum ssp. *leporinum*	hare barley	Introduced; Cal-IPC - Moderate
Hypochaeris glabra	smooth cat's ear	Introduced
Isocoma menzeisii	coastal goldenbush	Native
Lactuca serriola	prickly lettuce	Introduced
Lamium amplexicaule	henbit	Introduced
Lasthenia gracilis	common goldfields	Native
Lepidospartum squamatum	scale-broom	Native
Logfia filaginoides	California cottonrose	Native
Logfia gallica	daggerleaf cottonrose	Introduced
Lupinus bicolor	miniature lupine	Native
Lupinus concinnus	bajada lupine	Native
Lupinus hirsutissimus	stinging lupine	Native
Lupinus truncatus	blunt leaf lupine	Native
Malacothrix glabrata	desert dandelion	Native
Malosma laurina	laurel sumac	Native
Malva parviflora	cheeseweed	Introduced
Marah macrocarpa	wild cucumber	Native
Marrubium vulgare	horehound	Introduced; Cal-IPC - Limited
Matricaria discoidea	pineapple weed	Native
Medicago polymorpha	bur clover	Introduced; Cal-IPC - Limited
Melilotus indicus	sweet clover	Introduced
Mentzelia micrantha	blazing star	Native
Mimulus aurantiacus	bush monkey flower	Native
Mirabilis bigelovii	wishbone bush	Native
Nicotiana glauca	tree tobacco	Introduced; Cal-IPC - Moderate
Nicotiana quadrivalvis	Indian tobacco	Native
Pectocarya linearis ssp. *ferocula*	narrow-toothed pectocarya	Native
Pectocarya penicillata	winged pectocarya	Native
Phacelia cicutaria var. *hispida*	caterpillar phacelia	Native
Phacelia distans	common phacelia	Native
Phacelia ramosissima	branching phacelia	Native
Plagiobothrys canescens var. *catalinenis*	Santa Catalina popcornflower	Native
Plantago lanceolata	English plantain	Introduced
Polygonum aviculare	knotweed	Native
Pseudognaphalium californicum	California everlasting	Native
Quercus agrifolia	coast live oak	Native
Rumex crispus	curly dock	Introduced; Cal-IPC - Limited

Scientific Name	Common Name	Origin
Rumex hymenosepalus	desert rhubarb	Native
Salsola tragus	Russian thistle	Introduced; Cal-IPC - Limited
Salvia apiana	white sage	Native
Salvia columbariae	chia	Native
Salvia mellifera	black sage	Native
Sambucus nigra ssp. *caerulea*	blue elderberry	Native
Schismus barbatus	Mediterranean grass	Introduced; Cal-IPC - Limited
Senecio flaccidus	threadleaf ragwort	Native
Sisymbrium altissimum	tumble mustard	Introduced
Sisymbrium irio	London rocket	Introduced; Cal-IPC - Moderate
Sisymbrium orientale	hedge mustard	Introduced
Solanum xanti	nightshade	Native
Sonchus oleraceus	common sow thistle	Introduced
Stellaria media	chickweed	Introduced
Stephanomaria virgata	rod wire lettuce	Native
Stephanomeria exigua	small wire lettuce	Native
Stephanomeria pauciflora	wire lettuce	Native
Stipa miliacea	smilo grass	Introduced; Cal-IPC - Limited
Toxicoscordium fremontii	Fremont's death camas	Native
Tribulus terrestris	puncture vine	Introduced
Trichostema lanceolatum	vinegarweed	Native
Trifolium gracilentum	pinpoint clover	Native
Triticum aestivum	wheat	Introduced
Uropappus lindleyi	silverpuffs	Native
Urtica urens	dwarf nettle	Introduced
Verbena lasiostachys	common verbena	Native

Attachment C

Special Status Plant Species Potential to Occur

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Berberis nevinii Nevin's barberry	FE/CE G1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. Sandy or gravelly substrates. 70 - 825 m. Perennial evergreen shrub. **Blooms (Feb)Mar-Jun**	Low	Marginally suitable disturbed riparian and coastal scrub habitat present within study area. Not observed during 2020 surveys.
Calochortus catalinae Catalina mariposa lily	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 15 - 700 m. Perennial bulbiferous herb. **Blooms (Feb)Mar-Jun**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Detected in vicinity of study area in 2009. Not detected during 2020 surveys.
Calochortus clavatus var. *gracilis* slender mariposa lily	None/None G4T2T3/S2S3 1B.2	Chaparral, coastal scrub, valley and foothill grassland. 320 - 1000 m. Perennial bulbiferous herb. **Blooms Mar-Jun(Nov)**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during 2020 surveys.
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	None/None G3T2/S2 1B.2	Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. 710 - 2390 m. Perennial bulbiferous herb. **Blooms Apr-Jul**	No Potential	Suitable mesic habitat is not present within study area. Nearest record is approximately 3 miles north of study area, documented in 1989. Not detected during 2020 surveys.
Calochortus plummerae Plummer's mariposa lily	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. granitic, rocky. 100 - 1700 m. Perennial bulbiferous herb. **Blooms May-Jul**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during 2020 surveys.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC/CE G2T1/S1 1B.1	Coastal scrub (sandy), valley and foothill grassland. 150 - 1220 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat present within big sagebrush scrub. Not detected during 2020 surveys.
Dodecahema leptoceras slender-horned spineflower	FE/CE G1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan). Sandy. 200 - 760 m. Annual herb. **Blooms Apr-Jun**	Low	Marginally suitable habitat present within big sagebrush scrub. Not detected during 2020 surveys.
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay; open grassy areas within shrubland. 20 - 955 m. Annual herb. **Blooms Mar-May**	Moderate	Moderately suitable habitat present within chamise-California sagebrush scrub. Not detected during 2020 surveys.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools. . 30 - 655 m. Annual herb. **Blooms Apr-Jun**	No Potential	Suitable mesic habitat is not present within study area. No records within 5 miles of study area. Not detected during 2020 surveys.
Navarretia setiloba Piute Mountains navarretia	None/None G2/S2 1B.1	Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Clay or gravelly loam soils. 285 - 2100 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat is present within wild oat grasslands. No records within 5 miles of study area. Not detected during 2020 surveys.
Opuntia basilaris var. *brachyclada* short-joint beavertail	None/None G5T3/S3 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 425 - 1800 m. Perennial stem succulent. **Blooms Apr-Jun(Aug)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Not detected during 2020 surveys.
Orcuttia californica California Orcutt grass	FE/CE G1/S1 1B.1	Vernal pools. 15 - 660 m. Annual herb. **Blooms Apr-Aug**	No Potential	Suitable vernal pool habitat is not present within study area. Not detected during 2020 surveys.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes alkaline soils. 15 - 800 m. Annual herb. **Blooms Jan-Apr(May)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Only record in vicinity dates from 1901. Not detected during 2020 surveys.

FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species PT = Proposed Federal Threatened
SE = State Endangered ST = State Threatened SC = State Candidate SR = State Rare
VCLIS = Ventura County Locally Important Species

CRPR (CNPS California Rare Plant Rank)

1A = Presumed Extinct in California

1B = Rare, Threatened, or Endangered in California and elsewhere

2A = Plants presumed extirpated in California, but more common elsewhere

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3 = Many meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and are eligible for state listing; however, necessary information is lacking to adequately rank them.

4 = Limited distribution or infrequent throughout a broader area in California, some of the plans meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and few, if any, are eligible for state listing.

CRPR Threat Code Extension

.1=Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2=Fairly endangered in California (20-80 percent occurrences threatened)

.3=Not very endangered in California (<20 percent of occurrences threatened)

Attachment D

Representative Site Photographs

Photograph 1. View of wild oat grassland within central portion of study area, view to the north. March 24, 2020.

Photograph 2. View of wild oat grassland within central portion of study area, view to the west. May 22, 2020.

Photograph 3. View of California buckwheat scrub within northwest portion of study area, view to the northwest. March 24, 2020.

Photograph 4. View of chamise-California buckwheat scrub within northern portion of study area, view to the east. March 24, 2020.

Photograph 5. View of chamise-California buckwheat scrub within northern portion of study area, view to the west. May 22, 2020.

Photograph 6. View of big sagebrush scrub and giant reed break within southern portion of study area, view to the south. March 24, 2020.

Photograph 7. View of riverwash, big sagebrush scrub and giant reed break within southern portion of study area, view to the northeast. May 22, 2020.

Photograph 8. Overview study area, view to the southwest. March 24, 2020.

Photograph 9. Overview study area, view to the southwest. May 22, 2020.

F3

Placerita Meadows RPS Report 2021

Rincon Consultants, Inc.

1980 Orange Tree Lane
Suite 105
Redlands, California 92374

909 253 0705

info@rinconconsultants.com
www.rinconconsultants.com

June 24, 2021
Project No: 21-11189

Jeff Weber
Blackhall Studios
1415 Constitution Road SE
Atlanta, Georgia 30316
Via email: jeff@JWeberGroup.com

Subject: **Blackhall Studios Property 2021 Rare Plant Survey Report**
Santa Clarita, California

Dear Mr. Weber:

Rincon Consultants, Inc. (Rincon) prepared this Rare Plant Survey Report to provide Blackhall Studios (Blackhall) with the results of a focused rare ("special-status") plant survey conducted in the spring of 2021 at the Blackhall Studios Property (project site). This report documents the existing conditions of the project site and evaluates the potential presence for rare plant species.

Survey Location

The project site is located on parcel APN 2834-001-014, an approximately 92-acre undeveloped site in the City of Santa Clarita, California (Attachment A; Figure 1). The survey area consisted of the 92-acre project site, including a 100-ft buffer where accessible (excluding inaccessible private property). The rare plant surveys were completed on two different occasions during spring blooming periods to identify any rare plant species within the project area and 100-ft buffer. The project site is in an urbanized area in the southern portion of Santa Clarita. Adjacent land uses include residential developments to the north and east, and commercial and light industrial uses to the south and west. Land uses in the greater vicinity also include residential, commercial, and light industrial, as well as oilfields located approximately one mile to the east. The Newhall Metrolink right-of-way is located along the project site's western boundary, parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east. To the north of the project site are residential parcels.

Regulatory Background

Local, state, and federal agencies regulate protected plant species, including California Environmental Quality Act (CEQA), and may require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. Assessments for the potential occurrence of rare plant species are based upon known ranges, habitat preferences for the species, species occurrence records from the California Natural Diversity Database (CNDDB) and species occurrence records from other sites in the vicinity of the project site.

For the purpose of this report, rare plant species (also referred to as "special-status" species) are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act (FESA); those listed or candidates for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA); and those recognized by the CDFW under the California Rare Plant Rank (CRPR) system (Ranks 1 through 4, Table 1; Rank Threat Code Extensions, Table 2).

Table 1 California Rare Plant Rank Definitions

Rank	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 2 California Rare Plant Rank Threat Code Extensions

Threat Rank	Definitions
.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened)

Methodology

The rare plant surveys were floristic in nature (i.e., all plants encountered were identified to the lowest taxonomic level necessary to determine rarity) and generally followed the *CNPS Botanical Survey Guidelines* (CNPS 2001) and the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). The rare plant surveys were performed by Rincon Biologists Daniel Lenz and Genelle Watkins on May 5 and May 28, 2021, between the hours of 6:45 AM and 12:00 PM. All plant species observed within the 92-acre study area were recorded (Attachment B, Floral Compendium). Field surveys were scheduled to optimize detection of any rare plant species with potential to occur within the project site based on the known blooming periods of rare plant species that have been previously documented in the region (Attachment C).

The survey was conducted using systematic field techniques by walking meandering transects through the entire study area. Special attention was given to areas with a high potential to support rare plant species (e.g., vegetation community interfaces, areas with unique soils). Vegetation communities were described and mapped using the CDFW-CNPS Protocol for the Combined Vegetation Rapid Assessment and Relevé Field Form (CNPS 2019).

Results

No species listed as rare, threatened, or endangered under CESA or FESA, or CEQA special status plants were found within the study area during the 2021 botanical surveys. However, biologists identified a Pierson's morning glory (*Calystegia peirsonii*; CRPR 4.2) growing along the ridge on the northern side of the property (Figure 3) within habitat characterized as Wild Oat Grassland. This species is considered limited in its distribution within California, but is not state or federally protected. Peirson's morning glory is ranked by the CNPS as a CRPR 4.2 species. Plants with a CRPR of 4.2 are of limited distribution or infrequent throughout a broader area in California and are considered moderately threatened within California. These plants typically do not warrant consideration under CEQA Guidelines §15380 unless the specific circumstances relevant to local distributions make them of potential scientific interest. Some local agencies may also consider and list additional plants to be of "local concern" because of local or regional scarcity as determined by that agency per the CEQA Guidelines §15380; however, the City of Santa Clarita does not have such a list. Peirson's morning glory is relatively widespread in the local vicinity of the project.

All plant species observed were documented and a comprehensive floral compendium documenting all plant species observed is presented in Attachment B.

Rincon appreciates the opportunity to provide the information summarized in this report. Please do not hesitate in reaching out to the undersigned with questions related to the contents herein.

Sincerely,
Rincon Consultants, Inc.

Genelle Watkins
Associate Biologist

Robin Murray
Senior Botanist

Greg Ainsworth
Natural Resources Program Director

Attachments

Attachment A	Figures
Attachment B	Floral Compendium
Attachment C	Special Status Plant Species Potential to Occur
Attachment D	Representative Site Photographs

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Baldwin, B.G. (Ed.), D.H. Goldman (Ed.), D. J. Keil (Ed.), R. Patterson (Ed.), T. J. Rosatti (Ed.), D. H. Wilken (Ed.). 2012. The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded. University of California Press. Berkeley, California.

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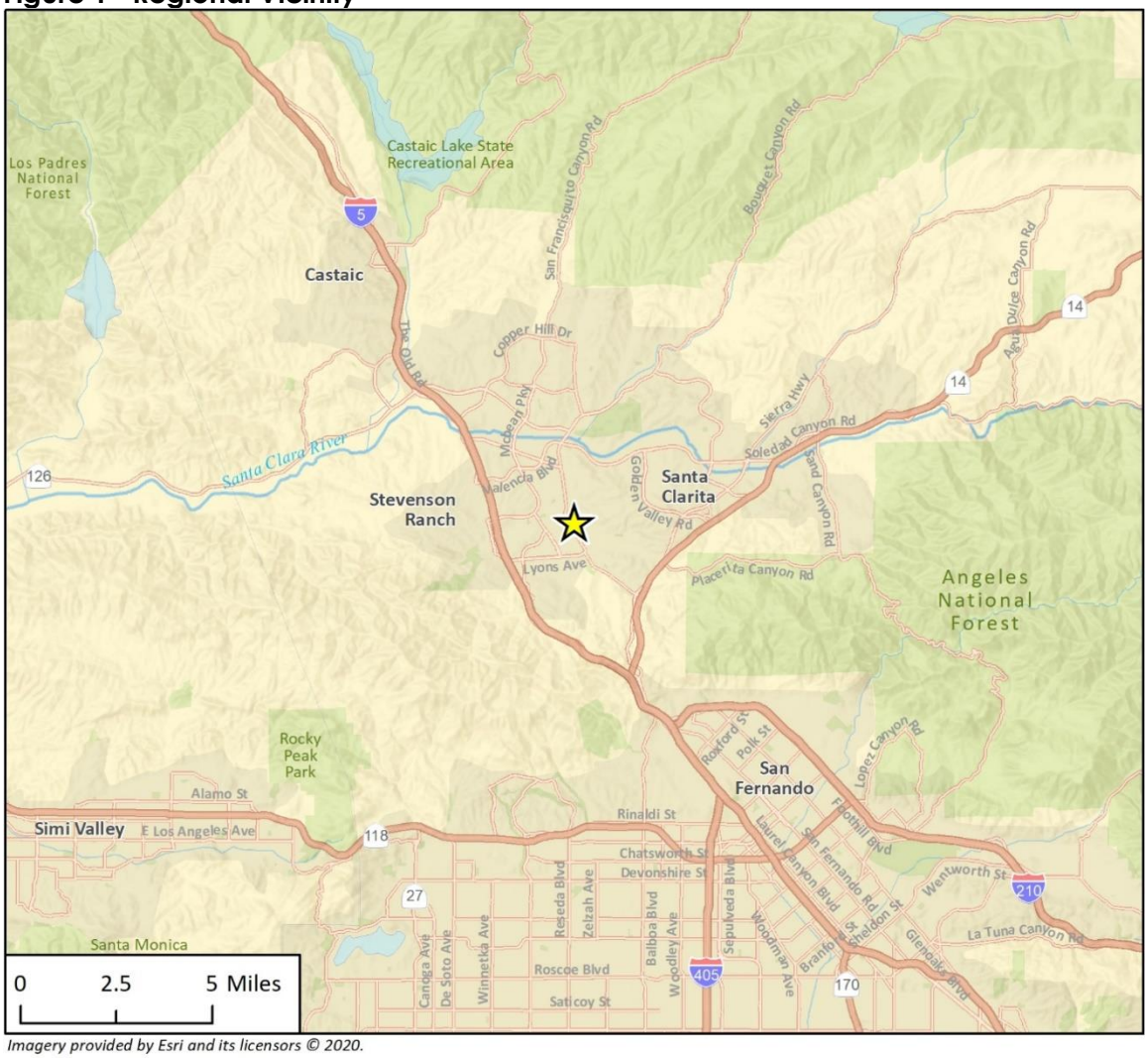
Attachment A

Figures

Figure 1 Regional Vicinity



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★ Project Location

N

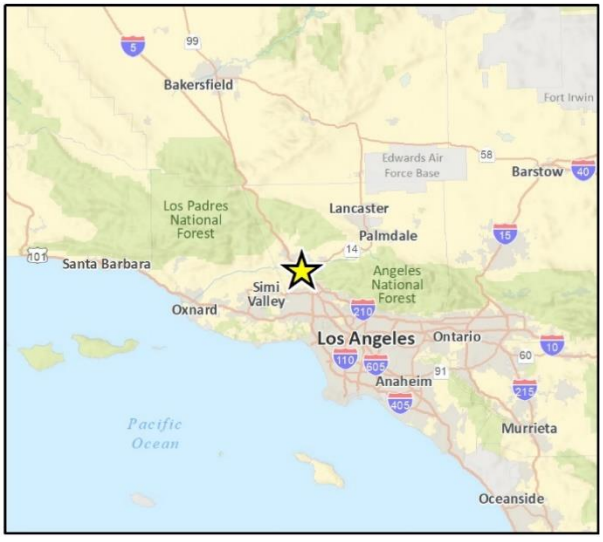
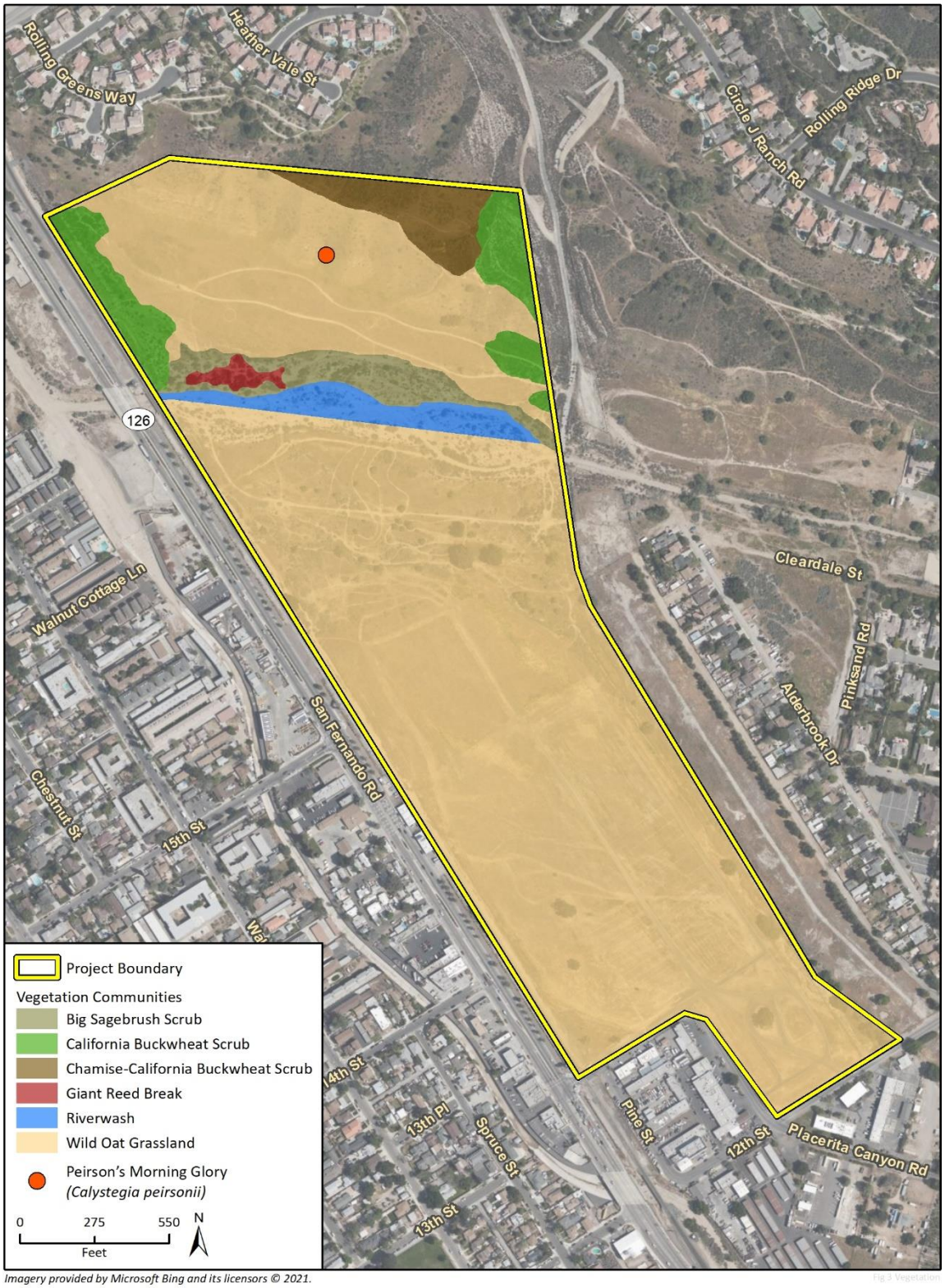


Figure 2 Study Area

Figure 3 Vegetation Communities and Rare Plants



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Attachment B

Floral Compendium

Scientific Name	Common Name	Origin
Acmispon glaber	deerweed	Native
Adenostoma fasciculatum	chamise	Native
Ailanthus altissima	tree of heaven	Introduced, Cal-IPC - Moderate
Ambrosia acanthicarpa	annual bur-sage	Native
Amsinckia menziesii	small-flowered fiddleneck	Native
Artemisia californica	California sagebrush	Native
Artemisia tridentata	big sagebrush	Native
Arundo donax	giant reed	Introduced; Cal-IPC - High
Asclepias fascicularis	narrow-leaf milkweed	Native
Astragalus trichopes var. *phoxus*	Santa Barbara milk vetch	Native
Avena barbata	slender oat	Introduced; Cal-IPC - Moderate
Avena fatua	wild oat	Introduced; Cal-IPC - Moderate
Baccharis salicifolia	mule fat	Native
Bromus diandrus	ripgut brome	Introduced; Cal-IPC - Moderate
Bromus rubens	red brome	Introduced; Cal-IPC - High
Bromus tectorum	cheat grass	Introduced; Cal-IPC - High
Calystegia peirsonii	Peirson's morning glory	Native; CRPR 4.2
Centaurea melitensis	tocalote	Introduced; Cal-IPC - Moderate
Clarkia purpurea	Purple clarkia	Native
Clarkia unguiculata	woodland clarkia	Native
Corethrogyne filaginifolia	California-aster	Native
Croton californicus	croton	Native
Croton setiger	turkey-mullein	Native
Cuscuta californica	chaparral dodder	Native
Datura wrightii	Jimson weed	Native
Deinandra fasciculata	tarplant	Native
Ericameria palmeri var. *pachylepis*	Palmer goldweed	Native
Eriodictyon crassifolium	thick-leaved yerba santa	Native
Eriogonum angulosum	angled stem buckwheat	Native
Eriogonum elongatum var. *elongatum*	long-stem buckwheat	Native
Eriogonum cinereum	ashy leaf buckwheat	Native
Eriogonum fasciculatum	California buckwheat	Native
Eriophyllum confertiflorum	golden yarrow	Native
Erodium cicutarium	redstem filaree	Introduced; Cal-IPC - Limited
Erodium moschatum	filaree	Introduced
Eschscholzia minutiflora	pygmy poppy	Native
Eulobus californicus	California suncup	Native
Euphorbia albomarginata	rattlesnake sandmat	native
Heliotropum curassavicum var. *oculatum*	alkali heliotrope	Native

Scientific Name	Common Name	Origin
Hesperoyucaa whipplei	Chaparral yucca	Native
Heterotheca grandiflora	telegraph weed	Native
Hirschfeldia incana	perennial mustard	Introduced; Cal-IPC - Moderate
Hordeum murinum ssp. *leporinum*	hare barley	Introduced; Cal-IPC - Moderate
Hypochaeris glabra	smooth cat's ear	Introduced
Isocoma menzeisii	coastal goldenbush	Native
Lactuca serriola	prickly lettuce	Introduced
Lamium amplexicaule	henbit	Introduced
Lasthenia gracilis	common goldfields	Native
Lepidospartum squamatum	scale-broom	Native
Logfia filaginoides	California cottonrose	Native
Logfia gallica	daggerleaf cottonrose	Introduced
Lupinus bicolor	miniature lupine	Native
Lupinus concinnus	bajada lupine	Native
Lupinus hirsutissimus	stinging lupine	Native
Lupinus truncatus	blunt leaf lupine	Native
Malacothrix glabrata	desert dandelion	Native
Malosma laurina	laurel sumac	Native
Malva parviflora	cheeseweed	Introduced
Marah macrocarpa	wild cucumber	Native
Marrubium vulgare	horehound	Introduced; Cal-IPC - Limited
Mimulus aurantiacus	bush monkey flower	Native
Nicotiana glauca	tree tobacco	Introduced; Cal-IPC - Moderate
Pectocarya penicillata	winged pectocarya	Native
Phacelia sp	phacelia	Native
Plagiobothrys canescens	grey popcorn flower	Native
Quercus agrifolia	coast live oak	Native
Quercus berberidifolia	scrub oak	Native
Ribes sp.	Currant	Native
Rumex hymenosepalus	desert rhubarb	Native
Salvia mellifera	black sage	Native
Salix exigua	sandbar willow	Native
Sambucus nigra ssp. *caerulea*	blue elderberry	Native
Sisymbrium irio	London rocket	Introduced; Cal-IPC - Moderate
Solanum xanti	nightshade	Native
Stephanomaria virgata	rod wire lettuce	Native
Uropappus lindleyi	silverpuffs	Native
Urtica urens	dwarf nettle	Introduced
Verbena lasiostachys	common verbena	Native

Attachment C

Special Status Plant Species Potential to Occur

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Berberis nevinii Nevin's barberry	FE/CE G1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. Sandy or gravelly substrates. 70 - 825 m. Perennial evergreen shrub. **Blooms (Feb) Mar-Jun**	Low	Marginally suitable disturbed riparian and coastal scrub habitat present within study area. Not observed during 2021 surveys.
Calochortus catalinae Catalina mariposa lily	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 15 - 700 m. Perennial bulbiferous herb. **Blooms (Feb) Mar-Jun**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Detected in vicinity of study area in 2009. Not detected during 2021 surveys.
Calochortus clavatus var. *gracilis* slender mariposa lily	None/None G4T2T3/S2S3 1B.2	Chaparral, coastal scrub, valley and foothill grassland. 320 - 1000 m. Perennial bulbiferous herb. **Blooms Mar-Jun (Nov)**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during 2021 surveys.
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	None/None G3T2/S2 1B.2	Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. 710 - 2390 m. Perennial bulbiferous herb. **Blooms Apr-Jul**	No Potential	Suitable mesic habitat is not present within study area. Nearest record is approximately 3 miles north of study area, documented in 1989. Not detected during 2021 surveys.
Calochortus plummerae Plummer's mariposa lily	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. granitic, rocky. 100 - 1700 m. Perennial bulbiferous herb. **Blooms May-Jul**	Moderate	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during 2021 surveys.
Calystegia peirsonii Peirson's morning glory	None/None G4/S4 4.2	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. **Blooms Apr-Jul**	Present	One individual observed within wild oat grassland within northern slope of site.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC/CE G2T1/S1 1B.1	Coastal scrub (sandy), valley and foothill grassland. 150 - 1220 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat present within big sagebrush scrub. Not detected during 2021 surveys.

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Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay; open grassy areas within shrubland. 20 - 955 m. Annual herb. **Blooms Mar-May**	Moderate	Moderately suitable habitat present within chamise-California sagebrush scrub. Not detected during 2021 surveys.
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools. 30 - 655 m. Annual herb. **Blooms Apr-Jun**	No Potential	Suitable mesic habitat is not present within study area. No records within 5 miles of study area. Not detected during 2021 surveys.
Navarretia setiloba Piute Mountains navarretia	None/None G2/S2 1B.1	Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Clay or gravelly loam soils. 285 - 2100 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat is present within wild oat grasslands. No records within 5 miles of study area. Not detected during 2021 surveys.
Opuntia basilaris var. *brachyclada* short-joint beavertail	None/None G5T3/S3 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 425 - 1800 m. Perennial stem succulent. **Blooms Apr-Jun (Aug)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Not detected during 2021 surveys.
Orcuttia californica California Orcutt grass	FE/CE G1/S1 1B.1	Vernal pools. 15 - 660 m. Annual herb. **Blooms Apr-Aug**	No Potential	Suitable vernal pool habitat is not present within study area. Not detected during 2021 surveys.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes alkaline soils. 15 - 800 m. Annual herb. **Blooms Jan-Apr (May)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Only record in vicinity dates from 1901. Not detected during 2021 surveys.

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.2=Fairly endangered in California (20-80 percent occurrences threatened)

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Attachment D

Representative Site Photographs

Photograph 1. View of wild oat grassland, oak, and elderberry trees at the southeast corner of the study area, view to the northwest. May 5, 2021.

Photograph 2. View of wild oat grassland near site entrance in the southern portion of study area, view to the south. May 28, 2021.

Photograph 3. View of California buckwheat scrub within northwest portion of study area, view facing west. May 28, 2021.

Photograph 3. View of California buckwheat scrub within central portion of study area, view to the east. May 5, 2021.

Photograph 4. View of chamise-California buckwheat scrub within northern portion of study area, view to the west. May 28, 2021.

Photograph 5. View of chamise-California buckwheat scrub within northern portion of study area, view facing south. May 28, 2021.

Photograph 6. View of big sagebrush scrub, including giant reed break area within southern portion of project site, view facing west. May 5, 2021.

Photograph 8. Overview of the northern portion of the study area, view facing the south. May 5, 2021.

Photograph 9. Overview of the study area, view facing the southeast. May 28, 2021.

Photograph 9. Peirson's morning glory (*Calystegia peirsonii*) on far northern ridge of project site. May 5, 2021.

Photograph 9. Peirson's morning glory (*Calystegia peirsonii*), in bloom May 5, 2021

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Blackhall RPS Report 2022

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

June 21, 2022
Project No: 21-11189

Jeff Weber
Blackhall Studios
1415 Constitution Road SE
Atlanta, Georgia 30316
Via email: jeff@JWeberGroup.com

Subject: **Blackhall Studios Property 2022 Rare Plant Survey Report**
Santa Clarita, California

Dear Mr. Weber:

Rincon Consultants, Inc. (Rincon) prepared this Rare Plant Survey Report to provide Blackhall Studios (Blackhall) with the results of a focused rare ("special-status") plant survey conducted in the spring of 2022 at the Blackhall Studios Property (project site). This report documents the existing conditions of the project site and evaluates the potential presence for rare plant species. This report serves as an update to the Blackhall Studios Property 2021 Rare Plant Survey Report (Rincon 2021).

Survey Location

The project site is located on parcel APN 2834-001-014, an approximately 93.5-acre undeveloped site in the City of Santa Clarita, California (Attachment A; Figure 1). The survey area consisted of the 93.5-acre project site, including a 100-ft buffer where accessible (excluding inaccessible private property). The rare plant surveys were completed in 2022 on two different occasions during spring blooming periods to identify any rare plant species within the project site and a 100-ft buffer (study area). The project site is in an urbanized area in the southern portion of Santa Clarita. Adjacent land uses include residential developments to the north and east, and commercial and light industrial uses to the south and west. Land uses in the greater vicinity also include residential, commercial, and light industrial, as well as oilfields located approximately one mile to the east. The Newhall Metrolink right-of-way is located along the project site's western boundary, parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east. To the north of the project site are residential parcels.

Regulatory Background

Local, state, and federal agencies regulate protected plant species, including California Environmental Quality Act (CEQA), and may require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. Assessments for the potential occurrence of rare plant species are based upon known ranges, habitat preferences for the species, species occurrence records from scientific database queries, previous reports for the site, and the results of surveys for the site.

For the purpose of this report, rare plant species (also referred to as "special-status" species) are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act (FESA); those listed or candidates for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA); and those recognized by the CDFW under the California Rare Plant Rank (CRPR) system (Ranks 1 through 4, Table 1; Rank Threat Code Extensions, Table 2).

Table 1 California Rare Plant Rank Definitions

Rank	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 2 California Rare Plant Rank Threat Code Extensions

Threat Rank	Definitions
.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened)

Methodology

Prior to conducting rare plant surveys, Rincon reviewed the 2020 and 2021 Rare Plant Survey Reports for the property (Rincon 2020; Rincon 2021), recent aerial photography of the study area, and consulted the CDFW's CNDDB (CDFW 2022), California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022), and U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2022) for information on general botanical resources, rare plant species occurrences, and critical habitat designations within a nine-quad search of the project site.

The rare plant surveys were floristic in nature (i.e., all plants encountered were identified to the lowest taxonomic level necessary to determine rarity) and generally followed the *CNPS Botanical Survey Guidelines* (CNPS 2001) and the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). The floristic surveys were scheduled during the appropriate blooming period(s) to optimize detection of rare plant species with potential to occur within the study area (Attachment B).

The rare plant surveys conducted in 2022 were performed by Rincon Biologists Carolyn Welch and Clarissa Rodriguez on April 29, 2022 between 8:00 AM and 3:00 PM and by Rincon Biologists Carolyn Welch, Kyle Gern, and Jason Suddith on May 24, 2022 between 7:00 AM and 1:00 PM. All plant species observed within the study area were recorded.

The surveys were conducted using systematic field techniques by walking meandering transects through accessible portions of the study area. Inaccessible areas within the study area were visually surveyed using binoculars. Special attention was given to areas with a high potential to support rare plant species (e.g., vegetation community interfaces, areas with unique soils). Nomenclature follows The Jepson Manual (Baldwin et al. 2012) and updates available in the online Jepson eFlora (Jepson Flora Project 2022), with protective status updates provided in the CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2022b) and the CNPS Online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022).

Results

A total of 122 plant species were observed within the study area during the 2022 botanical surveys. Of these, 86 are native and 36 are introduced. A comprehensive floral compendium documenting all plant species observed is presented in Attachment C. Representative site photographs are provided in Attachment D.

No species listed as rare, threatened, or endangered under CESA or FESA, or other special status plants were found within the study area during the 2022 botanical surveys, consistent with the 2020 and 2021 surveys (Rincon 2020; Rincon 2021). Approximately 90 Peirson's morning glory (*Calystegia peirsonii*; CRPR 4.2) individuals were observed along a hillside on the northern portion of the property (Figure 3) within grasslands dominated by wild oat (*Avena fatua*). They were distributed in clusters of up to 30 individuals along the hillside, and averaged approximately five individuals per cluster. The species was also documented in this location during the 2021 botanical surveys. This species is considered limited in its distribution within California, but is not state or federally protected. Peirson's morning glory is ranked by the CNPS as a CRPR 4.2 species (CNPS 2022). Plants with a CRPR of 4.2 are of limited distribution or infrequent throughout a broader area in California and are considered moderately threatened within California. These plants typically do not warrant consideration under CEQA Guidelines §15380 unless the specific circumstances relevant to local distributions make them of potential scientific interest. Some local agencies may also consider and list additional plants to be of "local concern" because of local or regional scarcity as determined by that agency per the CEQA Guidelines §15380; however, the City of Santa Clarita does not have such a list. Peirson's morning glory is relatively widespread in the local vicinity of the project (Calflora 2022). No additional mitigation would be required under CEQA for impacts to this species.

Rincon appreciates the opportunity to provide the information summarized in this report. Please do not hesitate in reaching out to the undersigned with questions related to the contents herein.

Sincerely,
Rincon Consultants, Inc.

Greg Ainsworth
Natural Resources Program Director

Robin Murray
Senior Biologist/Botanist

Attachments

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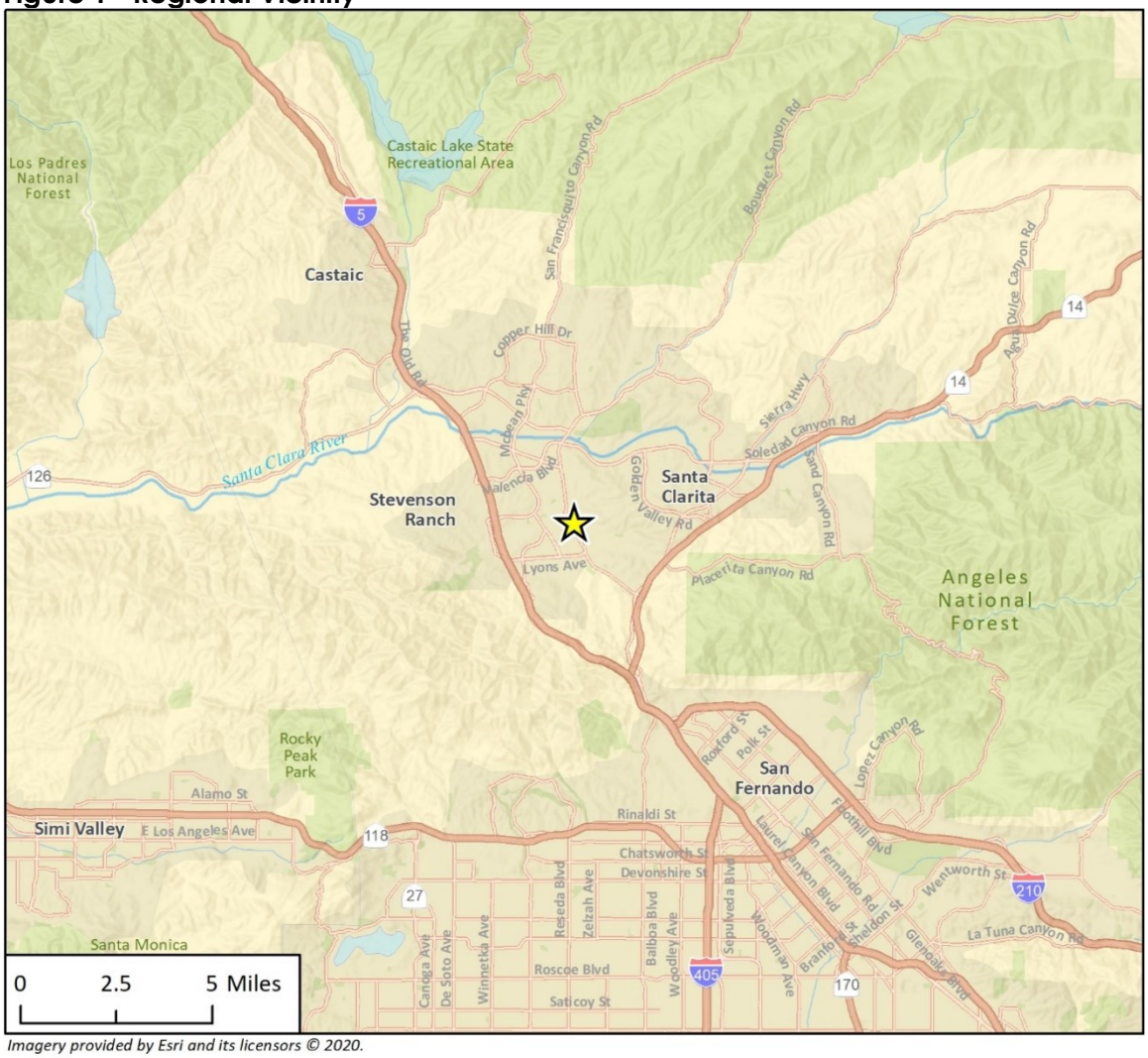
Attachment A

Figures

Figure 1 Regional Vicinity



Imagery provided by Esri and its licensors © 2020.

Project Location

N

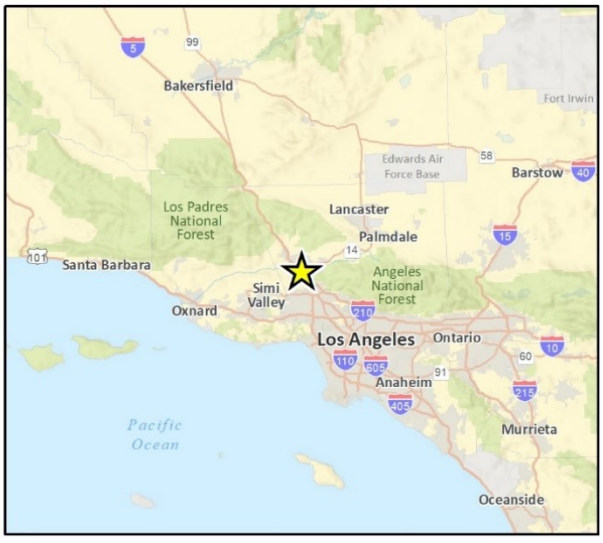


Figure 2 Study Area

Imagery provided by Microsoft Bing and its licensors © 2022.

Fig 2 Project Location 20220520

Figure 3 Rare Plants

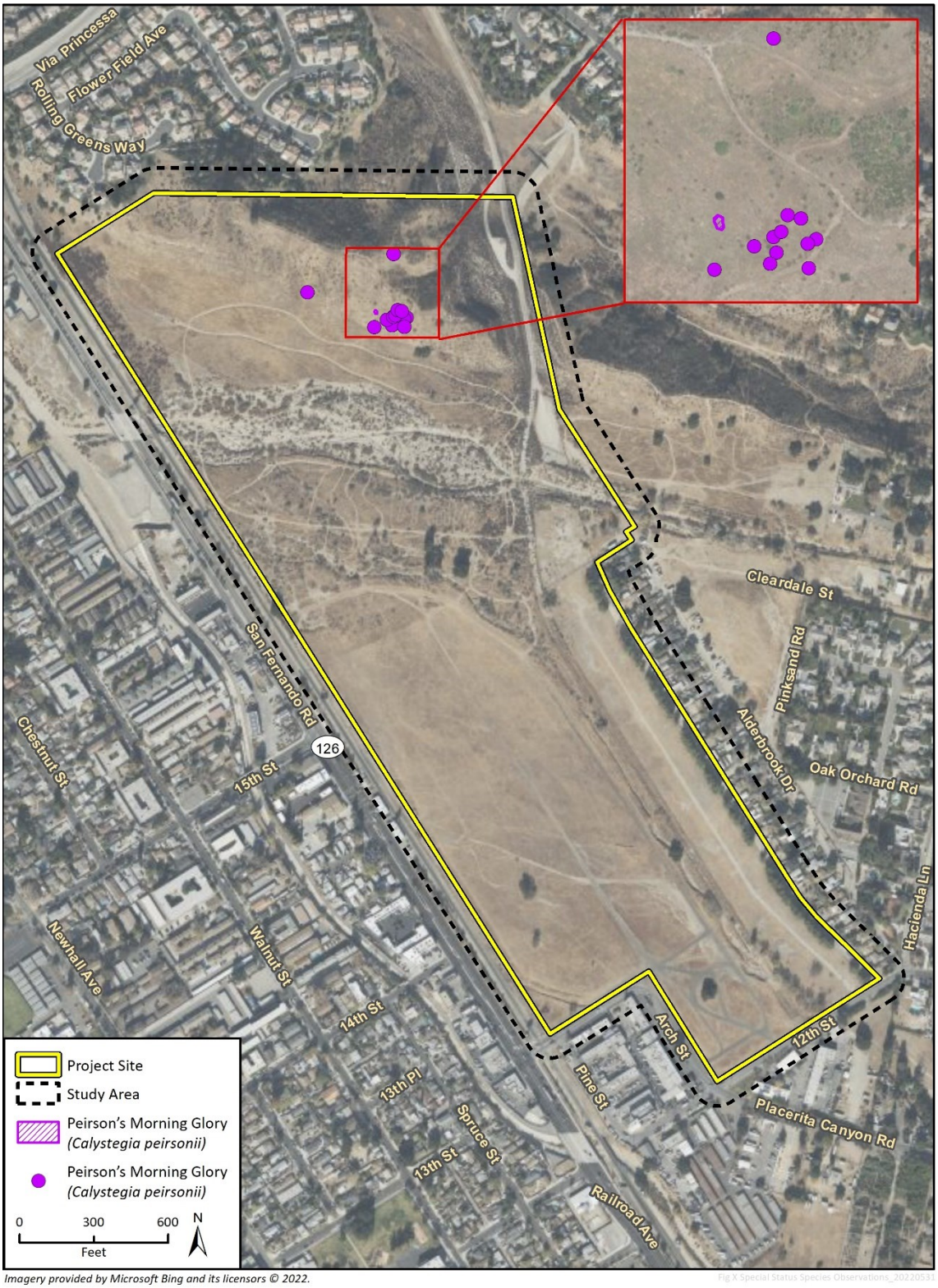


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Fig X Special Status Species Observations_20220531

Attachment B

Special Status Plant Species Potential to Occur

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Berberis nevinii Nevin's barberry	FE/CE 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. Sandy or gravelly substrates. 70 - 825 m. Perennial evergreen shrub. **Blooms (Feb) Mar-Jun**	Low	Marginally suitable disturbed riparian and coastal scrub habitat present within study area. Not observed during field surveys in 2021 or 2022.
Calochortus catalinae Catalina mariposa lily	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 15 - 700 m. Perennial bulbiferous herb. **Blooms (Feb) Mar-Jun**	Low	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Detected in vicinity of study area in 2009. Not detected during field surveys in 2021 or 2022.
Calochortus clavatus var. *gracilis* slender mariposa lily	None/None G4T2T3/S2S3 1B.2	Chaparral, coastal scrub, valley and foothill grassland. 320 - 1000 m. Perennial bulbiferous herb. **Blooms Mar-Jun (Nov)**	Low	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during field surveys in 2021 or 2022.
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	None/None G3T2/S2 1B.2	Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. 710 - 2390 m. Perennial bulbiferous herb. **Blooms Apr-Jul**	No Potential	Suitable mesic habitat is not present within study area. Nearest record is approximately 3 miles north of study area, documented in 1989. Not detected during field surveys in 2021 or 2022.
Calochortus plummerae Plummer's mariposa lily	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. granitic, rocky. 100 - 1700 m. Perennial bulbiferous herb. **Blooms May-Jul**	Low	Moderately suitable habitat is present within slopes of wild oat grassland and California buckwheat scrub. Numerous records within 5 miles of study area. Not detected during field surveys in 2021 or 2022.
Calystegia peirsonii Peirson's morning glory	None/None G4/S4 4.2	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. **Blooms Apr-Jul**	Present	Multiple individuals observed within wild oat grassland within northern slope of site during 2021 and 2022 surveys.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC/CE G2T1/S1 1B.1	Coastal scrub (sandy), valley and foothill grassland. 150 - 1220 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat present within big sagebrush scrub. Not detected during field surveys in 2021 or 2022.
Dodecahema leptoceras slender-horned spineflower	FE/CE G1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan). Sandy. 200 - 760 m. Annual herb. **Blooms Apr-Jun**	Low	Marginally suitable habitat present within big sagebrush scrub. Not detected during field surveys in 2021 or 2022.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay; open grassy areas within shrubland. 20 - 955 m. Annual herb. **Blooms Mar-May**	Low	Moderately suitable habitat present within chamise-California sagebrush scrub. Not detected during field surveys in 2021 or 2022.
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools. 30 - 655 m. Annual herb. **Blooms Apr-Jun**	No Potential	Suitable mesic habitat is not present within study area. No records within 5 miles of study area. Not detected during field surveys in 2021 or 2022.
Navarretia setiloba Piute Mountains navarretia	None/None G2/S2 1B.1	Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Clay or gravelly loam soils. 285 - 2100 m. Annual herb. **Blooms Apr-Jul**	Low	Marginally suitable habitat is present within wild oat grasslands. No records within 5 miles of study area. Not detected during field surveys in 2021 or 2022.
Opuntia basilaris var. *brachyclada* short-joint beavertail	None/None G5T3/S3 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 425 - 1800 m. Perennial stem succulent. **Blooms Apr-Jun (Aug)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Not detected during field surveys in 2021 or 2022.
Orcuttia californica California Orcutt grass	FE/CE G1/S1 1B.1	Vernal pools. 15 - 660 m. Annual herb. **Blooms Apr-Aug**	No Potential	Suitable vernal pool habitat is not present within study area. Not detected during field surveys in 2021 or 2022.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes alkaline soils. 15 - 800 m. Annual herb. **Blooms Jan-Apr (May)**	Low	Marginally suitable habitat is present within California buckwheat scrub. Only record in vicinity dates from 1901. Not detected during field surveys in 2021 or 2022.

FE = Federally Endangered | FT = Federally Threatened | FC = Federal Candidate Species | PT = Proposed Federal Threatened
SE = State Endangered | ST = State Threatened | SC = State Candidate | SR = State Rare
VCLIS = Ventura County Locally Important Species

CRPR (CNPS California Rare Plant Rank)

1A = Presumed Extinct in California

1B = Rare, Threatened, or Endangered in California and elsewhere

2A = Plants presumed extirpated in California, but more common elsewhere

2B = Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3 = Many meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and are eligible for state listing; however, necessary information is lacking to adequately rank them.

4 = Limited distribution or infrequent throughout a broader area in California, some of the plans meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and few, if any, are eligible for state listing.

CRPR Threat Code Extension

.1=Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2=Fairly endangered in California (20-80 percent occurrences threatened)

.3=Not very endangered in California (<20 percent of occurrences threatened)

Attachment C

Floral Compendium

Scientific Name[1]	Common Name	Origin[2]
Acmispon americanus var. *americanus*	Spanish lotus	Native
Acmispon glaber	deerweed	Native
Acmispon maritimus	coastal lotus	Native
Adenostoma fasciculatum	chamise	Native
Ailanthus altissima	tree of heaven	Introduced, Cal-IPC - Moderate
Ambrosia acanthicarpa	annual bur-sage	Native
Amsinckia menziesii	small-flowered fiddleneck	Native
Amsinckia retrorsa	rigid fiddleneck	Native
Artemisia californica	California sagebrush	Native
Artemisia tridentata	big sagebrush	Native
Arundo donax	giant reed	Introduced; Cal-IPC - High
Asclepias eriocarpa	milkweed	Native
Astragalus trichopes var. *phoxus*	Santa Barbara milk vetch	Native
Avena barbata	slender oat	Introduced; Cal-IPC - Moderate
Avena fatua	wild oat	Introduced; Cal-IPC - Moderate
Baccharis salicifolia	mule fat	Native
Brassica nigra	black mustard	Introduced; Cal-IPC - Moderate
Brickellia californica	California brickellbush	Native
Bromus diandrus	ripgut brome	Introduced; Cal-IPC - Moderate
Bromus hordeaceus	soft chess	Introduced; Cal-IPC - Limited
Bromus rubens	red brome	Introduced; Cal-IPC - High
Bromus tectorum	cheat grass	Introduced; Cal-IPC - High
Calochortus venustus	butterfly mariposa lily	Native
Calystegia peirsonii	**Peirson's morning glory**	**Native; CRPR 4.2**
Camissoniopsis confusa	San Bernardino suncup	Native
Camissoniopsis micrantha	miniature suncup	Native
Capsella bursa-pastoris	shepherd's purse	Introduced
Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	Introduced
Castilleja exserta	owl's clover	Native
Ceanothus crassifolius var. *crassifolius*	hoary leaved ceanothus	Native

Scientific Name[1]	Common Name	Origin[2]
Centaurea melitensis	tocalote	Introduced; Cal-IPC - Moderate
Chaenactis glabriuscula	yellow pincushion	Native
Chenopodium album	lambs quarters	Introduced
Chenopodium desiccatum	dry goosefoot	Native
Chenopodium murale	nettle leaf goosefoot	Introduced
Clarkia purpurea	Purple clarkia	Native
Clarkia unguiculata	woodland clarkia	Native
Corethrogyne filaginifolia	California-aster	Native
Croton californicus	croton	Native
Croton setiger	turkey-mullein	Native
Cuscuta californica	chaparral dodder	Native
Datura wrightii	Jimson weed	Native
Deinandra fasciculata	tarplant	Native
Dipterostemon capitatus	bluedick	Native
Elymus triticoides	creeping wildrye	Native
Emmenanthe penduliflora	whispering bells	Native
Eriastrum densifolium	giant woollystar	Native
Ericameria nauseosa	rubber rabbitbrush	Native
Ericameria palmeri var. *pachylepis*	Palmer goldweed	Native
Erigeron canadensis	Canada horseweed	Native
Eriodictyon crassifolium	thick-leaved yerba santa	Native
Eriogonum elongatum var. *elongatum*	long-stem buckwheat	Native
Eriogonum fasciculatum	California buckwheat	Native
Erodium cicutarium	redstem filaree	Introduced; Cal-IPC - Limited
Erodium moschatum	filaree	Introduced
Eschscholzia californica	California poppy	Native
Eschscholzia minutiflora	pygmy poppy	Native
Eucrypta chrysanthemifolia var. *chrysanthemifolia*	common eucrypta	Native
Eulobus californicus	California suncup	Native
Euphorbia albomarginata	rattlesnake sandmat	native
Festuca myuros	rattail sixweeks grass	Introduced; Cal-IPC - Moderate
Galium angustifolium ssp. angustifolium	narrowleaf bedstraw	Native
Gilia angelensis	chaparral gilia	Native
Heliotropium curassavicum var. *oculatum*	alkali heliotrope	Native

Scientific Name[1]	Common Name	Origin[2]
Hesperoyucca whipplei	Chaparral yucca	Native
Heterotheca grandiflora	telegraph weed	Native
Hirschfeldia incana	perennial mustard	Introduced; Cal-IPC - Moderate
Hordeum murinum ssp. *leporinum*	hare barley	Introduced; Cal-IPC - Moderate
Isocoma menziesii	coastal goldenbush	Native
Lactuca serriola	prickly lettuce	Introduced
Lepidospartum squamatum	scale-broom	Native
Logfia filaginoides	California cottonrose	Native
Logfia gallica	daggerleaf cottonrose	Introduced
Lupinus bicolor	miniature lupine	Native
Lupinus hirsutissimus	stinging lupine	Native
Lupinus microcarpus var. *densiflorus*	chick lupine	Native
Lupinus truncatus	blunt leaf lupine	Native
Malosma laurina	laurel sumac	Native
Malva parviflora	cheeseweed	Introduced
Marah macrocarpa	wild cucumber	Native
Marrubium vulgare	horehound	Introduced; Cal-IPC - Limited
Medicago polymorpha	burr clover	Introduced; Cal-IPC - Limited
Melia azedarach	China berry tree	Introduced
Melilotus indicus	yellow sweetclover	Introduced
Mirabilis laevis	wishbone plant	Native
Nerium oleander	oleander	Introduced
Nicotiana glauca	tree tobacco	Introduced; Cal-IPC - Moderate
Opuntia basilaris var. *basilaris*	beavertail cactus	Native
Pectocarya penicillata	winged pectocarya	Native
Phacelia cicutaria	caterpillar phacelia	Native
Phacelia distans	common phacelia	Native
Phacelia ramosissima	branching phacelia	Native
Plagiobothrys canescens	grey popcorn flower	Native
Plantago lanceolata	lanceleaf plantain	Introduced; Cal-IPC - Limited
Polygonum aviculare	prostrate knotweed	Introduced
Populus fremontii	Fremont cottonwood	Native
Pseudognaphalium californica	ladies tobacco	Native
Quercus agrifolia	coast live oak	Native

Scientific Name[1]	Common Name	Origin[2]
Quercus berberidifolia	scrub oak	Native
Quercus lobata	valley oak	Native
Rafinesquia californica	California chicory	Native
Ribes aureum	golden currant	Native
Rumex hymenosepalus	desert rhubarb	Native
Salix exigua	sandbar willow	Native
Salix lasiolepis	arroyo willow	Native
Salsola tragus	Russian thistle	Introduced; Cal-IPC - Limited
Salvia columbariae	chia	Native
Salvia mellifera	black sage	Native
Sambucus nigra ssp. *caerulea*	blue elderberry	Native
Schismus sp.	schismus	Introduced; Cal-IPC - Limited
Sisymbrium irio	London rocket	Introduced; Cal-IPC - Moderate
Solanum xanti	nightshade	Native
Spergularia rubra	Purple sand spurry	Introduced
Tetradymia comosa	cotton thorn	Native
Trichostema lanceolatum	vinegarweed	Native
Trifolium gracilentum	graceful clover	Native
Uropappus lindleyi	silverpuffs	Native
Urtica urens	dwarf nettle	Introduced
Verbena lasiostachys	common verbena	Native
Veronica anagallis-aquatica	water speedwell	Introduced
Xanthium strumarium	rough cocklebur	Native

[1] Jepson Flora Project 2022.
[2] Cal-IPC 2022; CNPS 2022.

Attachment D

Representative Site Photographs

Photograph 1. View of wild oat grassland along northern hillside in the northern portion of the study area, view to the northwest. April 29, 2022.

Photograph 2. View of study area from the south-facing hillside in the northern portion of the study area, view to the south. April 29, 2022.

Photograph 3. View of Placerita Creek from the south-facing hillside in the northern portion of the study area, view facing south. April 29, 2022.

Photograph 4. View of California buckwheat scrub within northern portion of study area, view to the east. April 29, 2022.

Photograph 5. View of Placerita Creek in the central portion of the study area, view facing east. April 29, 2022.

Photograph 6. View of Peirson's morning glory within northern portion of study area. May 24, 2022.

Photograph 7. View of Peirson's morning glory blooming within northern portion of study area. May 5, 2021.

Appendix G

Arbor Essence Oak Tree Report

Arbor Essence

DRAFT

July 1, 2021

Jeff Weber
J Weber Group
901 Dove Street, Suite 270
Newport Beach, CA 92660-3038

Regarding: Blackhall Studios
Railroad and 13th Street
Santa Clarita, CA

Dear Mr. Weber,

At your request I visited the above referenced site June 24, 2021. I was asked to perform an inventory and evaluation of protected oak trees on the property and prepare a Protected Oak Tree Report.

My inspection was visual only and performed from ground level. I did not employ and extensive or invasive diagnostics for this trees study. Trunk are measured at 54 inches above soil grade, height is visually estimated. Trees are rated using the condition rating system provided by the city of Santa Clarita. The trees included in this study are identified by number, where a tag is typically attached to the of the trunk. Tree location, and location of protective fencing are indicated on site plans as needed.

Summary

A total of (16) protected trees are included as part of this report and are identified as coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*).

The site contains 7 *heritage* size trees. A heritage oak tree is defined as any oak tree measuring one hundred eight (108) inches or, in the case of a multiple trunk tree, two (2) or more trunks measuring seventy-two (72) inches each or greater in circumference, measured four and one-half (4 1⁄2) feet above the natural grade surrounding such tree.

The project includes development of a new studio lot complex with multiple buildings and road improvements.

A total of 13 protected oaks are proposed for removal as part of this project, including 7 Heritage trees.

Photos are provided for all inventoried trees in this study.

Observations

The property is a large, vacant site, where a studio complex is to be constructed.

The site is mostly level terrain with, mountains at the north end of the site.

Many of the trees on this site are not suitable for preservation in a business or residential setting due to hazardous conditions caused by fire, structural defects and or disease. Some are in failing condition.

Tree Evaluations

Refer to included spreadsheets for specific tree information, specifications, condition rating and relative comments. An appraisal value has been calculated for all protected trees, individual appraisal work sheets are provided for all proposed tree removals and encroachments.

Coast live oak #1, Heritage

This tree has 3 primary stems and appears to be in good health but contains significant structural defects. It appears that a large stem growing towards the east failed some time ago continuing to grow horizontally above the ground, this stem also contains a large cavity. It is also apparent that at least two large stems were removed from the tree, one leaving a decayed stump in the lower portion of the main stem creating a hazard.

Coast live oak #2, Heritage

This tree is in good health but has developed very poor branching structure with several codominat stems. The tree is located growing just down slope of a wash/drainage on the east perimeter of the property.

Coast live oak #3, Heritage

The tree appears to be in stable health; however the tree has suffered severe damage from fire leaving the trunk and scaffold limbs heavily scarred with areas of decay. The tree is considered high risk for limb failures.

Coast live oak #4, Heritage

The tree appears to be in stable health; however the tree has suffered severe damage from fire leaving the trunk and scaffold limbs heavily scarred with areas of decay. A large stem failure has resulting in the loss of 50% of the trees crown. The tree is considered high risk for failure.

Coast live oak #5, Heritage

The tree appears to be in stable health; however the tree has suffered severe damage from fire leaving the trunk and scaffold limbs heavily scarred with areas of decay and the tree contains a large trunk cavity. This tree is considered a high risk for failure.

Coast live oak #6, Heritage

This tree is in good health with no apparent pest problems. Structure is fair.

Valley oak #7, Heritage

This tree appears to be in stable health but have significant structural and disease problems. The tree contains a large trunk wound that has been colonized by Laetiporus, a known wood decay fungi. Incipient decay was observed in the main trunk. The tree also displays a history of limb failures. This tree is considered a high risk for failure, as the disease and decay will only worsen over time.

Valley oak #8
This tree appears to be in stable health with moderate stress symptoms, probably drought induced. No apparent pest or major structural problems were observed in the tree.

Valley oak #9
This tree appears to be in stable health with moderate stress symptoms, probably drought induced. No apparent pest or major structural problems were observed in the tree.

Valley oak #10
This tree appears to be in stable health with moderate stress symptoms, probably drought induced. No apparent pest or major structural problems were observed in the tree.

Coast live oak #11
This tree appears to be in stable healthy with moderate stress symptoms, probably drought induced. The tree has multiple codominant stems. There is a sizeable cavity at the base of the tree which contains a beehive. The basal trunk cavity creates a hazardous condition with likelihood of failure in the near future.

Coast live oak #12
This tree appears to be in stable health. Structure is very poor with the main stem growing horizontally along the ground to the northeast, there is also a basal cavity in the main stem.

Coast live oak #13
This tree appears to be in stable health but displays stress symptoms with dieback, probably drought induced. Structure is multiple codominat stems with included bark.

Coast live oak #14
A portion of this tree appears to be in stable health. The tree is actually in a failing condition due to fire damage. Half the tree has failed and the main stems contain structural defects in the form of dried wood and cracking, there is also a beehive in trunk cavities. The tree is outside the main construction area and could be preserved as habitat.

Coast live oak #15
The tree appears to be in stable health but has been severely damaged by fire. The main stem contains a cavity in the crotch where main stems converge and the trunk is severely damaged. The tree is outside the main construction area and could be preserved as habitat.

Coast live oak #16
This tree does have a crown of healthy foliage; however the tree is in very poor condition. The tree is basically stump regrowth, contains a large trunk cavity with a beehive, and the tree is structurally failing. The tree is outside the main construction area and could be preserved as habitat.

Proposed Construction and Potential Tree Impacts

Proposed development includes major grading at the north end of the site for a parking lot and construction several studio production buildings. A total of 13 oak trees (#1-13) are proposed for removal, as they are located in the footprint of proposed buildings and grading. There are three oak trees (#14-16) atop the mountains at the north end of the site that are to be preserved in place with no anticipated encroachment.

Appraised tree values are based on calculations using the "Trunk Formula" and or "Replacement Cost" method from the 9th edition of "Guide for Plant Appraisal".

Several methods are utilized to determine the value of landscape plants. The two most common methods are the "Trunk Formula" and "Replacement Cost" methods. One of the most common practices is the "Trunk Formula Method" used when a tree is larger than what is commonly available in the industry. The "Replacement Cost" is based on the cost of replacing a plant of the same or comparable species and size in the same area, and "Cost of Repair" can be used when repairing a damaged plant in a timely and satisfactory manner may help to return the plant to near its former condition. For this study the appropriate methods to be used are the "Trunk Formula" and "Replacement Cost" methods to determine the value of trees.

Four primary factors are used to help determine the value of landscape plants; these include tree species, condition, size and location. Size is determined by measurement, while the other factors are subjective. Species rating often varies geographically; this rating is determined by the CTLA. Condition factors include health and structure of roots, trunk, scaffold branches, small branches and twigs, foliage and buds.

Location involves the site of a property or landscape, a plants unique functional and aesthetic contribution, and the placement of the individual plant in a specific landscape. The location rating is the average of the site, contribution, and placement percentage ratings.

A base value is established/extrapolated using current nursery and nursery grower costs, and then some depreciation is factored in based on species, and condition of the plant.

Conclusion/Justification statement

I believe that proposed development is reasonable use of the property and will enhance the community.

Mitigation

The owner is more than willing to mitigate the removal of oak trees by planting specimen size replacement trees on or off-site.

Tree Condition Rating System
A – Outstanding: A healthy, sound and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, structural problems, disease or pest infestation
B – Above average: A healthy, sound and vigorous tree with minor signs of stress, disease and or pest infestation
C – Average: Although healthy in overall appearance there exists an abnormal amount of stress, pest infestation or visual signs of minor structural problems.
D – Below Average/Poor: This tree is characterized by exhibiting a great degree of stress, pests 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
F – Dead: This tree exhibits no sign of life whatsoever

Actions and mitigation measures

- No changes in soil grade shall be made within the tree protection zone other than in the approved work area
- No heavy equipment shall be moved within the protected zone of any tree
- Construction debris shall not be stored or disposed of within the protected zone of any tree.
- Any required pruning of trees shall be supervised and performed to meet ISA and ANSI 300 pruning standards
- No landscaping or irrigation shall be installed within the protected zone of any oak tree, or closer than 15 feet to the trunk
- Planting of mitigation trees shall be done in compliance with city mandate
- Landscaping near oaks shall be limited to drought tolerant or native plants only. No irrigation shall be installed closer than 15 feet to an oak tree and shall not wet trunks. No turf shall be planted within the dripline of any oak

It should be noted that the study of trees is not an exact science and arboriculture does not detect or predict with any certainty. The arborist therefore is not responsible for tree defects or soil conditions that cannot be identified by a prudent and reasonable inspection.

If you have any questions or require other services please contact me at the number listed below.

Respectfully,
Arbor Essence

Kerry Norman
ASCA, Registered Consulting Arborist #471
ISA Board-Certified Master Arborist #WE-3643B
ISA Tree Risk Assessor Qualification, exp. 2020

Enclosed
Oak tree report
Spreadsheets
Tree appraisal works sheets
Site plan/tree map
Tree photos

Date: June 24, 2021
Job name: Blackhall Studios
Santa Clarita, CA

Arbor Essence
Tree Survey

Tree #	Description	Circumf.	Ht	Canopy	Condition	Comments/Impact
1	Coast live oak (*Quercus agrifolia*) 3 stems	131"/82"/35"	50'	80'	C-	The tree is in good health but contains severe structural defects, trunk cavity/decay. Proposed for removal, in footprint of development
2	Coast live oak 4 stems	84"/75"/53"/47"	40'	60'	B	The tree is in good health. Condominant syems with bark inclusion. Proposed for removal in footprint of development
3	Coast live oak 3 stems	160"/119"/77"	60'	70'	C-	Tree severely fire damaged. Decay in scaffold limbs, hazardous. Proposed for removal in footprint of development
4	Coast live oak	232"	60'	70'	D	1/2 tree failed. Severe fire damage, trunk cavity/rot. Hazardous. Proposed for removal in footprint of development
5	Coast live oak 3 stems	116"/116"/75"	60'	60'	D	Severe fire damage. Large trunk cavity. Hazardous condition. Proposed for removal in footprint of development
6	Coast live oak	119"	50'	60'	B	Proposed for removal in footprint of proposed development
7	Valley oak (*Quercus lobata*)	135"	50'	60'	D	Large trunk wound colonized by Laetiporus decay fungus, trunk decay. History of limb failures. Proposed for removal in footprint of development.
8	Valley oak	57"	40'	40'	B	Proposed for removal in footprint of proposed development

Date: June 24, 2021
Job name: Blackhall Studios
Santa Clarita, CA

Arbor Essence
Tree Survey

Tree #	Description	Circumf.	Ht	Canopy	Condition	Comments/Impact
9	Valley oak	28"	30'	20'	B	Proposed for removal in footprint of proposed development
10	Valley oak	31"	30'	30'	B	Proposed for removal in footprint of proposed development
11	Coast live oak 5 stems	57"/57"/ 50"/38"/ 38"	40'	50'	C-	Tree appears healthy. Trunk cavity contains beehive, poor structure. Proposed for removal in footprint of development
12	Coast live oak	104"	30'	35'	C-	Tree growing horizontally above ground to north, basal trunk cavity. Proposed for removal in footprint of development.
13	Coast live oak 6 stems	47"/38"/ 31"/25"/ 22"/19"	35'	30'	C-	Tree stressed, dieback. Codominant stems with bark inclusion. Proposed for removal in footprint of development
14	Coast live oak 2 stems	75"/31"	30'	35'	D	Tree failing 90% dead. Crack in main stem. Can remain as habitat
15	Coast live oak 3 stems	82"/63"/ 63"	40'	40'	D	Fire damage, large trunk wound, cavity in crotch. Can remain as habitat
16	Coast live oak	88"	20'	20'	D	Large trunk cavity with beehive. Tree structurally failing. Can remain as habitat
	Heritge tree					

Date: June 24, 2021
Job name: Blackhall Studios
Railroad/13th Street
Santa Clarita, CA

Arbor Essence
Tree Appraisals

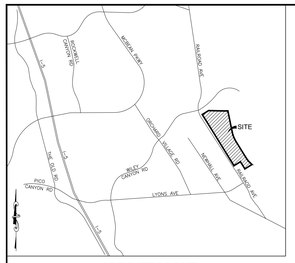
Tree #	Description	Appraised Trunk area	Unit Cost	Basic Tree Cost, incl replacment	Species	Condition	Location	Appraised cost
1	Coast live oak (*Quercus agrifolia*)	1859	$109	209,139	90%	50%	100%	$94,100
2	Coast live oak	1428	$109	158,236	90%	80%	100%	$113,900
3	Coast live oak	3091	$109	339,503	90%	60%	100%	$183,300
4	Coast live oak	2207	$109	243,147	90%	40%	100%	$87,500
5	Coast live oak	2488	$109	274,776	90%	40%	100%	$98,600
6	Coast live oak	1063	$109	118,451	90%	80%	100%	$85,300
7	Valley oak (Quercus lobata)	1273	$109	141,341	90%	30%	100%	$38,200
8	Valley oak	283	$109	33,431	90%	80%	100%	$24,100
9	Valley oak Replacement cost $1000 clean up	9"		19,000	90%	80%	100%	$14,700 incl $1000 clean up cost
10	Valley oak Replacement cost $1000 clean up	9"		19,000	90%	80%	100%	$14,700 incl $1000 clean up cost
11	Coast live oak	935	$109	104,499	90%	50%	100%	$47,000
12	Coast live oak	882	$109	98,722	90%	50%	100%	$44,400
13	Coast live oak	491	$109	56,103	90%	60%	100%	$30,300

Date: June 24, 2021
Job name: Blackhall Studios
Railroad/13th Street
Santa Clarita, CA

Arbor Essence
Tree Appraisals

Tree #	Description	Appraised Trunk area	Unit Cost	Basic Tree Cost, incl replacment	Species	Condition	Location	Appraised cost
14	Coast live oak	707	$109	79,647	90%	30%	100%	$21,500
15	Coast live oak	1159	$109	128,915	90%	50%	100%	$50,000
16	Coast live oak	615	$109	69,619	90%	30%	100%	$18,800
	Heritage Tree							

BLACKHALL STUDIOS
OAK TREE EXHIBIT
7/9/21

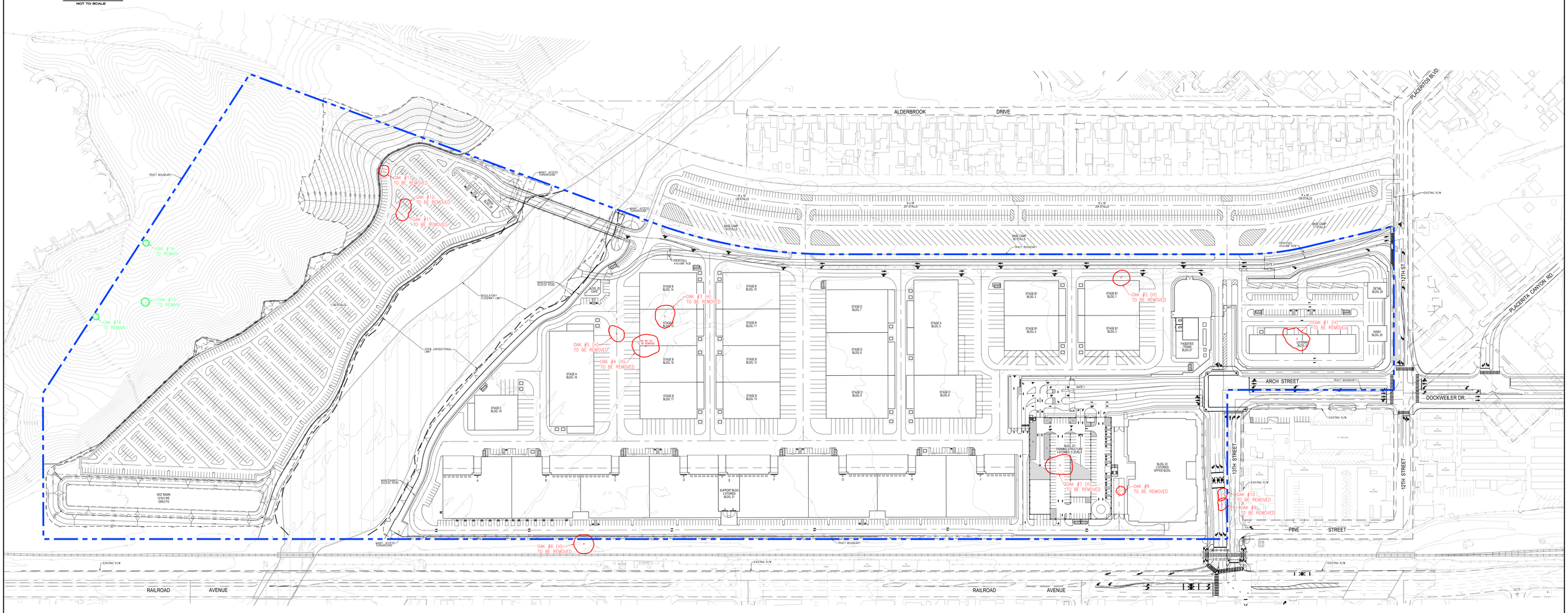


VICINITY MAP
NOT TO SCALE

LEGEND:

- OAK TREE TO REMAIN (3)
- OAK TREE TO BE REMOVED (13)
- (H) HERITAGE OAK

TOTAL: 16 OAK TREES



SCALE: 1"=120'

ALLIANCE
LAND PLANNING & ENGINEERING INC.
2248 FARADAY AVE.
CARLSBAD, CA 92008
TEL: (760) 431-9896
FAX: (760) 431-8802
27413 TOURNEY ROAD
SUITE 120
VALENCIA, CA 91355
TEL: (661) 799-2760
CIVIL ENGINEERING • LAND PLANNING • HILLSIDE DESIGN • SURVEYING

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Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #1

Coast live oak #1, decaying stump at base of main stem

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #1, large stem growing horizontally along ground

Coast live oak #1, large cavity in 26” stem

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Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #2

Coast live oak #2, codominant stems with included bark

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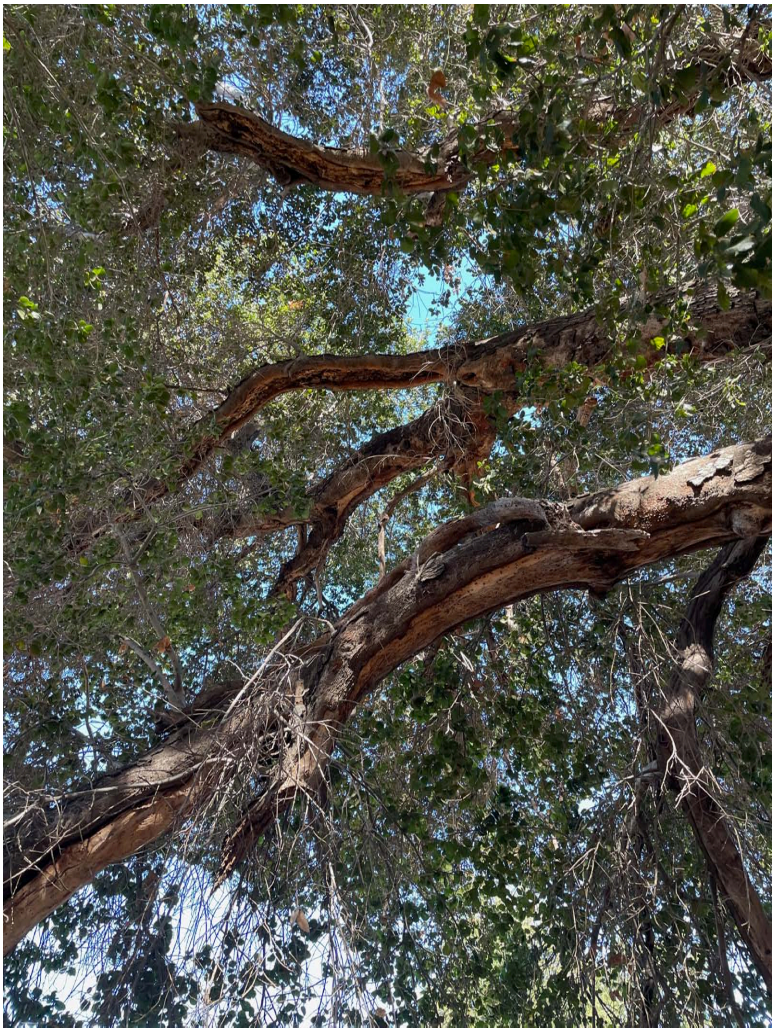
Santa Clarita
June 24, 2021

Coast live oak #3

Coast live oak #3, fire scarred trunk

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #3, major fire damage on limbs



Coast live oak #3, major fire damage on limbs

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Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #4

Coast live oak #4, large stem failure, cavity/decay in main stem

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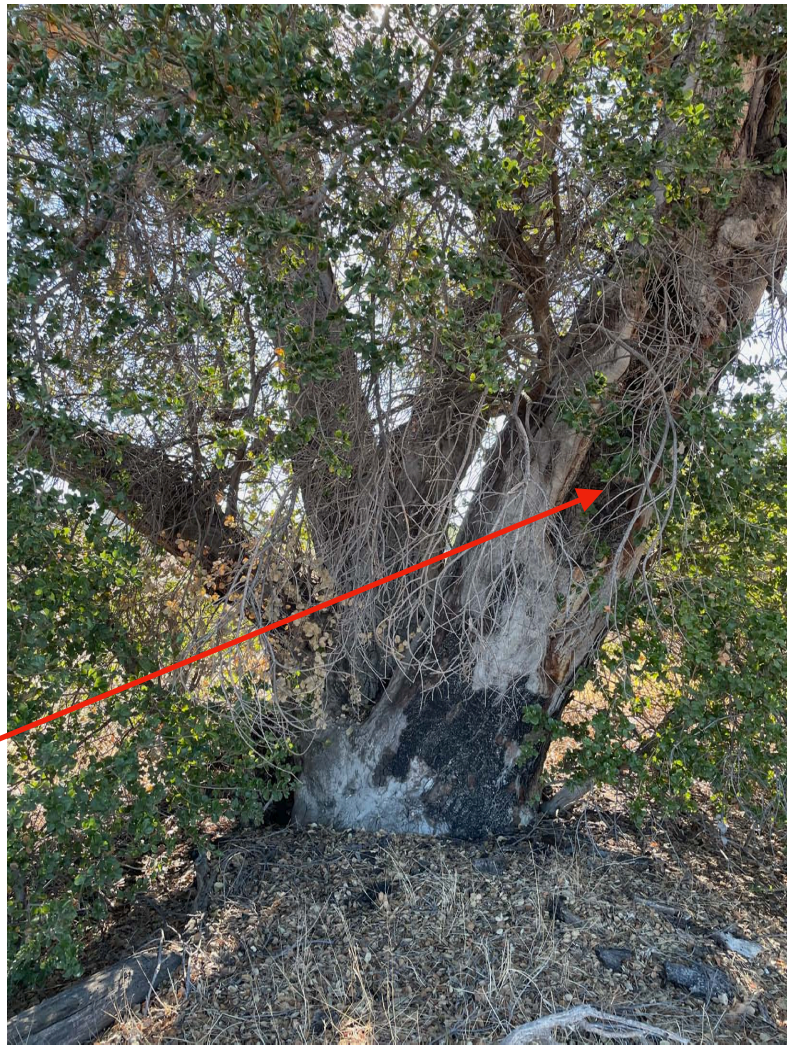
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #5



Cavity/decay in main stem

Coast live oak #5, major fire damage,
trunk cavities

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #6

Coast live oak #6, codominant branching structure

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Santa Clarita
June 24, 2021

Valley oak #7

Valley oak #7, Laetiporus wood decay fungus on trunk with incipient decay

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Santa Clarita
June 24, 2021

Valley oak #8

Valley oak #9

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Santa Clarita
June 24, 2021

Valley oak #10

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Santa Clarita
June 24, 2021

Coast live oak #11

Coast live oak #11, codominant stems,
basal cavity with beehive

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Santa Clarita
June 24, 2021

Coast live oak #12

Cavity opening

Coast live oak #12, horizontal growing trunk with large basal cavity

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Santa Clarita
June 24, 2021

Coast live oak #13

Coast live oak #13, codominant stems with included bark

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Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #14

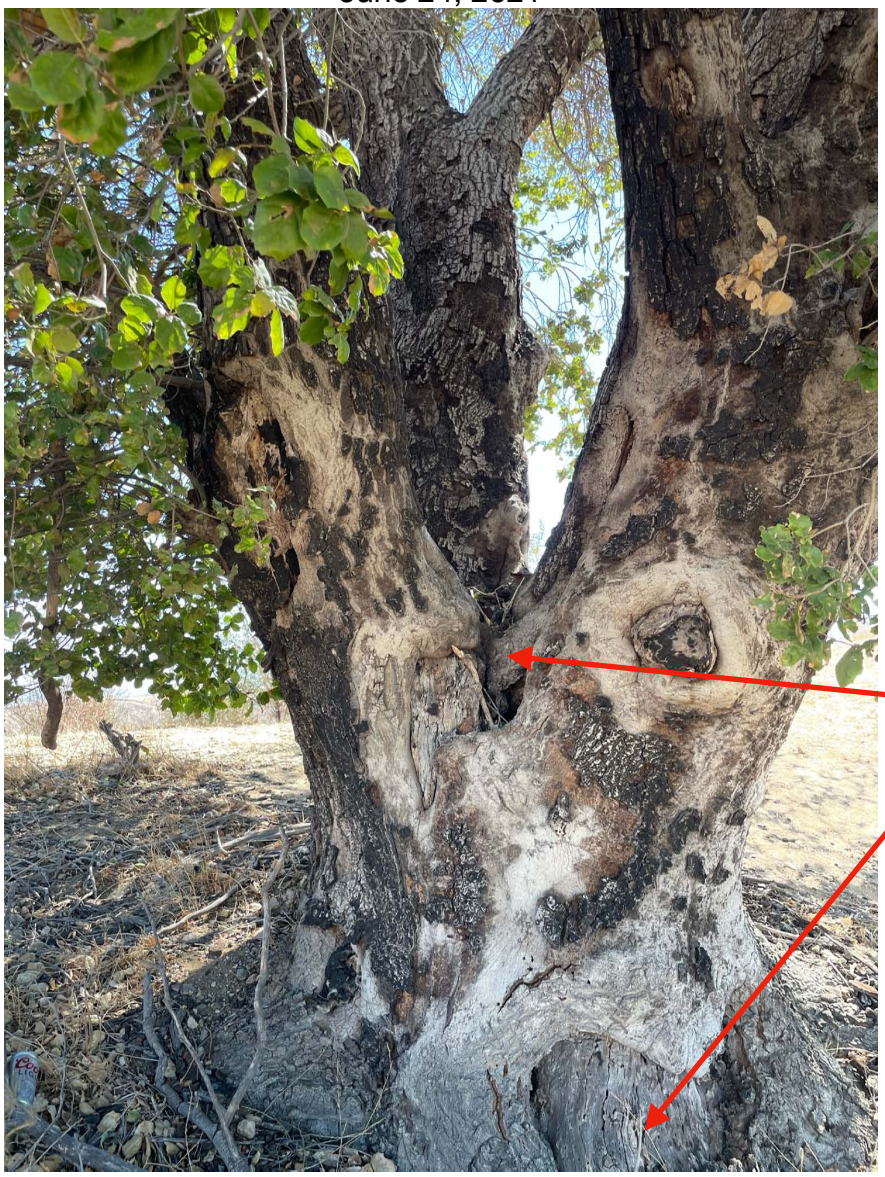
Coast live oak #14, stems died wood, cracked

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #14, stems 50% dead/dry

Coast live oak #15

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021



Coast live oak #15, fire scarred trunk,
cavities and ares of decay

Blackhall Studios
Railroad and 13th Street
Santa Clarita
June 24, 2021

Coast live oak #16

Coast live oak 316, stump growth, trunk cavities, beehive

Trunk Formula Method Worksheet

TREE

Case # 1 Property BLACKHALL STUDIOS Date 7-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 50%
3. **Trunk Circumference** _____ in./cm **Diameter** 1859 in./cm 42"|26"|11"
4. **Location** % = [**Site** 100 % + **Contribution** 100% + **Placement** 100%] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 1859 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 1859 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 1871 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 1871 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 209,139
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 209,139 × **Species** rating (#5) 90% × **Condition** (#2) 50% × **Location** (#4) 100% = $ 94,112.
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 94,100.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 2 Property BLACKBALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 80 % TOTAL 27"|24"|15"|17"
3. **Trunk Circumference** _____ in./cm **Diameter** 1428 in./cm
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 1428 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 1428 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 1404 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 1404 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 158,236
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 158,236 × **Species** rating (#5) 90 % × **Condition** (#2) 80 % × **Location** (#4) 100 % = $ 113,929
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 113,900.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 3 Property BLACKBALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 60 % TOTAL 51" | 38" | 24"
3. **Trunk Circumference** ____ in./cm **Diameter** 3091 in./cm
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600. (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2 (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:** (TA_A or ATA_A; use Tables 4.4–4.7) or c^2 (#3) ____ × 0.08 or d^2 (#3) ____ × 0.785 = 3091 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 3091 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 3,067 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 3,067 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 339,503
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 339,503 × **Species** rating (#5) 90 % × **Condition** (#2) 60 % × **Location** (#4) 100 % = $ 183,331
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 183,300.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE Case # 4 Property BLACKHALL STUDIOS Date 7-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 40 %
3. **Trunk Circumference** _____ in./cm **Diameter** 2207 in./cm 74"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 _____ in./cm
   (Trunk Area) 23.75 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 2207 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = 2183
    TA_A or ATA_A 2207 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = _____ in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 2183 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 243,147
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 243,147 × **Species** rating (#5) 90 % × **Condition** (#2) 40 % × **Location** (#4) 100 % = $ 87,533.
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 87,540.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 5 Property BLACKBALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 40% %
3. **Trunk Circumference** _____ in./cm **Diameter** 2488 in./cm 37"/37"/24"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5,5 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 2488 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 2488 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 2464 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 2464 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 273,776
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 273,776 × **Species** rating (#5) 90 % × **Condition** (#2) 40 % × **Location** (#4) 100 % = $ 98,560
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 98,600.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 6 Property BRICKHALL STUDIOS Date 7-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 80 %
3. **Trunk Circumference** _____ in./cm **Diameter** 1063 in./cm 38"
4. **Location** % = [**Site** 100 % + **Contribution** 80 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.6 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 1063 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 1063 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 1039 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 1039 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 118,451
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 118,451 × **Species** rating (#5) 90 % × **Condition** (#2) 80 % × **Location** (#4) 100 % = $ 85,284
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 85,300.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 7 Property BRICKHALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS LOBATA
2. **Condition** 30 %
3. **Trunk Circumference** _____ in./cm **Diameter** 1273 _____ in./cm 43"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 _____ in./cm
   (Trunk Area) 23.76 in²/cm² TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in²/cm²
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 1273 in²/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 1273 in²/cm² (#11) – TA_R 23.76 in²/cm² (#6) = 1249 in²/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 1249 in²/cm² × **Unit Tree Cost** (#10) $ 109 per in²/cm² + **Installed Tree Cost** (#9) $ 5200. = $ 141,341
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 141,341 × **Species** rating (#5) 90 % × **Condition** (#2) 30 % × **Location** (#4) 100 % = $ 38,162.
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 38,200.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 8 Property BLACKBALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS LOBATA
2. **Condition** 80 %
3. **Trunk Circumference** _____ in./cm **Diameter** 283 in./cm 19"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 _____ in./cm
   (Trunk Area) 23.76 in²/cm² TA_R
7. **Replacement Tree Cost** $ 2600.-
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.-
9. **Installed Tree Cost** (#7 + #8) $ 5200.-
10. **Unit Tree Cost** $ 109.- per in²/cm²
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 283 in²/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 283 in²/cm² (#11) – TA_R _____ in²/cm² (#6) = 259 in²/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 259 in²/cm² × **Unit Tree Cost** (#10) $ 109 per in²/cm² + **Installed Tree Cost** (#9) $ 5200.- = $33,431
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 33,431 × **Species** rating (#5) 90 % × **Condition** (#2) 80 % × **Location** (#4) 100 % = $ 24,070
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 24,100.-

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Replacement Cost Method Worksheet

Appraised Value =

[Installed Plant Cost × Species % × Condition % × Location %] + Removal and Cleanup Cost (if needed)

Installed Plant Cost = Replacement Plant Cost + Installation Cost

TREE Case # 9 Property BLACKHALL STUDIOS Date 6-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS LOBATA
2. **Condition** 80 %
3. **Trunk Circumference** ____ in./cm and/or **Diameter** 9 in./cm or **Shrub** or **Vine Size** (height/spread/volume) ____
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 160 %
5. **Removal and Cleanup Costs** for appraised plant or plant that will be replaced = $ 1,600

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

6. **Species** rating 90 %
7. **Replacement Plant Size** (diameter) 9" in./cm
8. **Replacement Plant Cost** = $ 9,500
9. **Installation Cost** = $ 9,500
10. Other Regional Information ____

Calculations by Appraiser Using Field and/or Regional Information

11. **Installed Plant Cost = Plant Cost** (#8) $ 9,500 + **Installation Cost** (#9) $ 9,500 = $ 19,000
12. **Adjusted Installed Plant Cost = Installed Plant Cost** (#11) $ 19,000 × **Species** rating (#6) 90 % × **Condition** (#2) 80 % × **Location** (#4) 160 % = $ 13,680
13. Add **Removal and Cleanup Costs** (#5) (if appraised plant is replaced). $ 1,600
14. The **Appraised Value** is either #12 or #13. = $ 14,680
15. If the **Appraised Value** (#14) is $5,000 or more, round it to the nearest $100; if it is less, round to nearest $10.
16. **Appraised Value** (#14) = $ 15,600

*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

Replacement Cost Method Worksheet

Appraised Value =

[Installed Plant Cost × Species % × Condition % × Location %] + Removal and Cleanup Cost (if needed)

Installed Plant Cost = Replacement Plant Cost + Installation Cost

TREE
~~Case~~ # 10 Property BLACKHALL STUDIOS Date 6-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS LOBATA
2. **Condition** 80 %
3. **Trunk Circumference** ____ in./cm and/or **Diameter** 10 in./cm or **Shrub** or **Vine Size** (height/spread/volume) ____
4. **Location** % = [**Site** 60 % + **Contribution** 60 % + **Placement** 100 %] ÷ 3 = 100 %
5. **Removal and Cleanup Costs** for appraised plant or plant that will be replaced = $ 1,000.

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

6. **Species** rating 90 %
7. **Replacement Plant Size** (diameter) 9 in./cm
8. **Replacement Plant Cost** = $ 9,500
9. **Installation Cost** = $ 9,500
10. Other Regional Information ____

Calculations by Appraiser Using Field and/or Regional Information

11. **Installed Plant Cost** = **Plant Cost** (#8) $ 9,500 + **Installation Cost** (#9) $ 9,500 = $ 19,000
12. **Adjusted Installed Plant Cost** = **Installed Plant Cost** (#11) $ 19,000 × **Species** rating (#6) 90 % × **Condition** (#2) 80 % × **Location** (#4) 100 % = $ 13,680
13. Add **Removal and Cleanup Costs** (#5) (if appraised plant is replaced). $ ____ = $ 1,000.
14. The **Appraised Value** is either #12 or #13. = $ 14,680
15. If the **Appraised Value** (#14) is $5,000 or more, round it to the nearest $100; if it is less, round to nearest $10.
16. **Appraised Value** (#14) = $ 14,700.

*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

Trunk Formula Method Worksheet

TREE
Case # 11 Property BRICKHALL STUDIOS Date 7-5-2021
Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 50 %
3. **Trunk Circumference** _____ in./cm **Diameter** 935 in./cm 18"/18"/16"/12"/12"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600. (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2 (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:** (TA_A or ATA_A; use Tables 4.4–4.7) or c^2 (#3) _____ × 0.08 or d^2 (#3) _____ × 0.785 = 935 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 935 in^2/cm^2 (#11) – TA_R 23.76 in^2/cm^2 (#6) = 911 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 911 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 104,499
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 104,499 × **Species** rating (#5) 90 % × **Condition** (#2) 50 % × **Location** (#4) 100 % = $ 47,025
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 47,000.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 12 Property BRICKHALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 50 %
3. **Trunk Circumference** _____ in./cm **Diameter** 34 in./cm
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5" in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 882 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 882 in^2/cm^2 (#11) – TA_R 23.76 in^2/cm^2 (#6) = 858 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 858 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 98,722
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 98,722 × **Species** rating (#5) 90 % × **Condition** (#2) 50 % × **Location** (#4) 100 % = $ 44,425.
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 44,400.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 13 Property BLACKBALL STUDIOS Date 7-5-2021
Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 60 %
3. **Trunk Circumference** _____ in./cm **Diameter** 491 in./cm 15"/12"/16"/6"/7"/6"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 491 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 491 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 467 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 467 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 56,103
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 56,103 × **Species** rating (#5) 90 % × **Condition** (#2) 60 % × **Location** (#4) 100 % = $ 30,296
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 30,300.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 14 Property BLACKHALL STUDIOS Date 7-5-2021

Appraiser KERRY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 30 %
3. **Trunk Circumference** ____ in./cm **Diameter** 707 in./cm 24"/10"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** (100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) ____ × 0.08
    or d^2 (#3) ____ × 0.785
    = 707 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = 683
    TA_A or ATA_A 707 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = ____ in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 683 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 79,647
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 79,647 × **Species** rating (#5) 90 % × **Condition** (#2) 30 % × **Location** (#4) 100 % = $ 21,505
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 21,500.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 15 Property BLACKBALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 50 %
3. **Trunk Circumference** _____ in./cm **Diameter** 1159 _____ in./cm 26"/20"/20"
4. **Location** % = [**Site** 100 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 100 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 _____ in./cm
   (Trunk Area) 23.76 in^2/cm^2 TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in^2/cm^2
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 1159 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 1159 in^2/cm^2 (#11) – TA_R 23.75 in^2/cm^2 (#6) = 1135 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 1135 in^2/cm^2 × **Unit Tree Cost** (#10) $ 109 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 5200. = $ 128,915
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 128,915 × **Species** rating (#5) 90 % × **Condition** (#2) 50 % × **Location** (#4) 100 % = $ 50,012
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 50,000.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method Worksheet

TREE
Case # 16 Property BRICKHALL STUDIOS Date 7-5-2021

Appraiser KEARY NORMAN

Field Observations

1. **Species** QUERCUS AGRIFOLIA
2. **Condition** 30 %
3. **Trunk Circumference** _____ in./cm **Diameter** 28" in./cm
4. **Location** % = [**Site** 60 % + **Contribution** 100 % + **Placement** 100 %] ÷ 3 = 60%

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 5.5 _____ in./cm
   (Trunk Area) 23.76 in²/cm² TA_R
7. **Replacement Tree Cost** $ 2600.
   (see Regional Information to use **Cost** selected)
8. **Installation Cost** $ 2600.
9. **Installed Tree Cost** (#7 + #8) $ 5200.
10. **Unit Tree Cost** $ 109. per in²/cm²
    (see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 615 in²/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 615 in²/cm² (#11) – TA_R 23.76 in²/cm² (#6) = 591 in²/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 591 in²/cm² × **Unit Tree Cost** (#10) $ 109 per in²/cm² + **Installed Tree Cost** (#9) $ 5200. = $69,619
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 69,619 × **Species** rating (#5) 90% × **Condition** (#2) 30% × **Location** (#4) 100% = $ 18,797
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 18,800.

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Appendix H

Burrowing Owl Habitat Assessment and Focused Species Survey Report

Rincon Consultants, Inc.

250 East 1st Street, Suite 1400
Los Angeles, California 90012

213 788 4842

info@rinconconsultants.com
www.rinconconsultants.com

July 8, 2022
Project No: 21-11189

Jeff Weber
Blackhall Studios
1415 Constitution Road SE
Atlanta, Georgia 30316
Via email: jeff@JWeberGroup.com

Subject: Burrowing Owl Habitat Assessment and Focused Survey Results for the Blackhall Studios Project, City of Santa Clarita, Los Angeles County, California

Dear Mr. Weber:

This report documents the findings of a western burrowing owl (*Athene cunicularia)* habitat assessment, focused burrow survey, and focused owl survey conducted for the Blackhall Studios Project (project). The purpose of this habitat assessment and focused survey was to identify and document suitable habitat for, and the presence/absence of, western burrowing owls.

Project Location and Description

The proposed project includes an approximately 93.5acre undeveloped site in the City of Santa Clarita, California (Attachment 1; Figure 1) and includes Accessor Parcel Number (APN) 2834-001-014. The project is situated in an urbanized area in the southern portion of Santa Clarita. Adjacent land uses include residential developments to the north and east as well as commercial and industrial developments to the south and west. The Newhall Metrolink right-of-way (ROW) is located along the site's western boundary parallel to Railroad Avenue. An existing developed and fenced utility corridor on Metropolitan Water District of Southern California property forms the eastern boundary, which is flanked by residential development along Alderbrook Drive to the east.

The proposed project is a state-of-the-art, full-service film and television studio campus that is planned for the currently vacant 93.5-acre parcel of land situated at the northeast corner of Railroad Avenue and 13th Street. The campus has been strategically designed to provide on-site integration of all the diverse functions required in the production process.

Burrowing Owl Natural History

Western burrowing owl is a California Department of Fish and Wildlife (CDFW) species of special concern (CDFW 2022a). Primarily restricted to the western United States and Mexico, its habitat includes dry, open, short-grass areas often associated with burrowing mammals, such as California ground squirrel (*Otospermophilus beecheyi*).

The burrowing owl is crepuscular and perches during daylight at the entrance to its burrow or on low posts. Nesting typically occurs from March through August. Burrowing owls form a pair-bond for more than one year and exhibit high site fidelity, reusing the same burrow year after year. The female remains

inside the burrow during most of the egg laying and incubation periods and is fed by the male through the brooding period. Western burrowing owls are opportunistic feeders, consuming a diet that includes arthropods, small mammals, birds, and occasionally amphibians and reptiles (Shuford and Gardali 2008). Typical burrowing owl sign includes, but is not limited to, feathers, white-wash, and pellets.

The western burrowing owl was once abundant and widely distributed in coastal Southern California, but loss of suitable habitat from urbanization has resulted in its decline in recent years. Other contributions include the poisoning of squirrels (which can be part of the burrowing owl's diet) and collisions with automobiles (Shuford and Gardali 2008).

Methodology

The habitat assessment, focused burrow survey, and focused breeding season owl surveys were performed 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 according to guidelines outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The surveys were conducted each day by one biologist with experience and knowledge of burrowing owl life history and sign. The project site was assessed on foot by the biologist 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. Due to offsite constraints (i.e., developed private property and fenced-off areas), the majority of the 150-meter buffer was inaccessible on foot; therefore, the biologists visually inspected offsite suitable habitat with binoculars.

Suitable habitat was identified by the presence of low vegetation cover, presence of potentially suitable small mammal burrows, and perch sites. Suitable nesting and foraging habitat for burrowing owl was mapped and is depicted in Figure 3.

Survey dates and site conditions are reflected in Table 1 below.

Table 1 Survey Dates and Site Conditions

Survey Number	Date	Time (24 hr)	Surveyor	Air Temp (°F)	Wind Speed (mph)	Precipitation
Habitat Assessment, Focused Burrow Survey, Protocol Survey 1	April 7, 2022	0600 – 0830	Kevin Gugerty	65 – 76	0-5	No
Protocol Survey 2	April 28, 2022	0600 – 0900	Amy Leigh Trost	62 – 74	0 – 3	No
Protocol Survey 3	May 19, 2022	0600 – 0900	Amy Leigh Trost	54 – 62	0 – 3	No
Protocol Survey 4	June 10, 2022	0600 – 0835	Amy Leigh Trost	63 – 75	0 – 1	No

Existing Site Conditions

Topography

Apart from the hillslopes in the northern portion, the study area is generally level. Elevation ranges between approximately 1,210 and 1,320 feet above mean sea level (msl). In the northern portion of the

study area, the terrain slopes from the tops of low hills downward to the southwest toward Placerita Creek; in the southern and central portions, the site gently slopes downward from the southeast to the northwest toward Placerita Creek.

Soils

Information about the soil types present within the study area was obtained from the NRCS Online Web Soil Survey (U.S. Department of Agriculture Natural Resources Conservation Service [USDA NRCS] 2021). Based on data from the soil survey, seven soil map units underlie the study area. Overall soil characteristics onsite may differ from these mapped soil types due to past and ongoing surface disturbances.

Hanford sandy loam, 0 to 2 percent slopes (HcA)

The Hanford series, mapped in disturbed wild oat grasslands within the southern half of the study area, consists of very deep, well-drained soils typically located on stream bottoms and is formed in sandy alluvium from dominantly granitic alluvium; the soil profile is described as having a fine sandy loam texture.

Metz loamy sand, 0 to 2 percent slopes (MfA)

The Metz series, mapped just south of Placerita Creek, consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. This series consists of fine sandy loams and typically occurs on floodplains and alluvial fans.

Riverwash (Rg)

Riverwash soils occur within the Placerita Creek channel. This soil type is typically sandy, gravelly, or cobbly, it is somewhat poorly drained and experiences frequent flooding. Riverwash is listed as a hydric soil on the NRCS Hydric Soils List for the Antelope Valley Area (USDA NRCS 2021b).

Sorrento loam, 0 to 2 percent slopes (SsA)

The Sorrento series, mapped along the northern portion of Placerita Creek and disturbed wild oat grasslands north of the creek, consists of very deep, well drained, moderately alkaline soils that formed in medium textured alluvium, mostly from sedimentary formations. Sorrento soils occur on alluvial fans and stabilized floodplains and have a fine-loamy texture.

Ojai loam, 2 to 9 percent slopes (OgC) and 30 to 50 percent slopes (OgF)

Soils on the northern slopes and southern tip of the study area are mapped as the Ojai series, which consists of well drained loamy soils that are formed in alluvium derived from sedimentary rock and occur on terraces.

Yolo Loam, 0 to 9 Percent Slopes

The Ojai series consists of very deep, well drained soils that are formed in alluvium of mixed rocks. This soil series often occurs on alluvial fans and floodplains. Yolo loam soils are listed as hydric soils on the NRCS Hydric Soils List (USDA NRCS 2021b).

Vegetation

Taxonomic nomenclature in this report is based on the following resources: the second edition of *The Jepson Manual* (Baldwin et al. 2012) and the Jepson Online Interchange for California Floristics (Jepson Flora Project 2019). Categorization and mapping of on-site vegetation communities generally follows the California Natural Community List (CDFW 2022b). Six vegetation communities and land cover types occur within the project area including big sagebrush scrub, California buckwheat scrub, chamise-California buckwheat scrub, and scale broom scrub; and non-native communities consisting of wild oat and annual brome grasslands and giant reed break. In addition, anthropogenic land covers consisting of disturbed areas are present within the project site.

Wild Oat and Annual Brome Grasslands (Avena spp. *– Bromus* spp. *Herbaceous Semi-Natural Alliance)*

Wild oat and annual brome grasslands are found in all topographic settings in foothills, waste places, rangelands, and openings in woodlands between 0-7,215 feet (0-2,200 meters) in elevation. Wild oats (*Avena barbata*, *A. fatua*), bromes (*Bromus diandrus, Bromus hordeaceus*), and/or barley (*Hordeum murinum*) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover.

This vegetation community covers the majority of the site and occurs in a large open, flat area and the lower portion of the hills within the central portion of the site. The herbaceous layer is dominated by wild oat, ripgut brome (*Bromus diandrus*), rattail fescue (*Festuca myuros*), and cheat grass (*Bromus tectorum*). Non-native forbs such as perennial mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), horehound (*Marrubium vulgare*), and tocalote (*Centaurea melitensis*) were also commonly observed within this community. This community exhibits evidence of regular human disturbance, as it is traversed by several actively used dirt roads and trails, and supports a homogenous, predominantly nonnative plant species composition and low habitat complexity.

This vegetation community contains suitable habitat for burrowing owl throughout the project site.

California Buckwheat Scrub (Eriogonum fasciculatum Shrubland Alliance)

California buckwheat scrub is typically found along upland sloped, intermittently flooded arroyos, channels and washes, and rarely within flooded low-gradient deposits, between 0-3,940 feet (0-1,200 meters) in elevation. Soils are typically course, well drained, and moderately acidic to slightly saline. California buckwheat (*Eriogonum fasciculatum*) contributes to at least 50 percent relative cover in the shrub layer.

This vegetation community is found along the western border of the study area. California buckwheat is dominant in the open shrub layer, with California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*) present as subdominant species. The herbaceous layer is dominated by wild oats, black mustard, and cheatgrass.

This vegetation community does not contain suitable habitat for burrowing owl due to the density of shrubs within this community on the project site.

Chamise-California Buckwheat Scrub (Adenostoma fasciculata-Eriogonum fasciculatum Shrubland Association)

Chamise-California buckwheat scrub is found within varied topography, typically within shallow soils over colluvium and many kinds of bedrock, between 30-5,900 feet (10-1,800 meters) in elevation. Chamise (*Adenostoma fasciculata*) and California buckwheat comprise at least 50 percent cover in the shrub layer.

This vegetation community is found within the northeastern portion of the study area, on the northeastern-facing slope of a hill. Chamise is dominant in the dense shrub layer, with California buckwheat present as a subdominant species. The herbaceous layer is sparse due to the density of the shrub layer. Commonly encountered herbaceous species include miniature lupine (*Lupinus bicolor*), woodland clarkia (*Clarkia unguiculata*), wishbone bush (*Mirabilis bigelovii*), and death camas (*Toxicoscordion fremontii*).

This vegetation community does not contain suitable habitat for burrowing owl due to the steep location of this on the project site.

Big Sagebrush Scrub (Artemisia tridentata ssp. *parishii* Provisional *Shrubland Association)*

Big sagebrush scrub is typically found within plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, hills, ridges, seasonal and perennial stream channels, and dry washes between 984-9,840 feet (30-3,000 meters) in elevation. Big sagebrush (*Artemisia tridentata* ssp. *parishii*) constitutes at least 2 percent absolute cover in the shrub layer, with no other single species with greater cover.

This vegetation community is found in several distinct patches south of Placerita Creek. Soils consist of coarse sand. Big sagebrush (*Artemisia tridentata* ssp. *parishii*) is dominant in the open shrub layer, with California buckwheat and California sagebrush commonly present. The herbaceous layer is sparse and dominated by black mustard. This community appears to have been fragmented by previous off-highway vehicle usage.

This vegetation community does not contain suitable habitat for burrowing owl due to the density of shrubs within this community on the project site.

Giant Reed Break (Arundo donax Semi-Natural Alliance)

This herbaceous semi-natural alliance is found within riparian areas, along low-gradient streams and ditches, as well as within semi-permanently flooded and slightly brackish marshes and impoundments, from 0-1,600 meters in elevation. Giant reed (*Arundo donax*) dominates the herbaceous layer. Giant reed is provided a rating of high by the California Invasive Plant Council (Cal-IPC 2021), indicating that the species has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Its reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment.

This vegetation community is found within Placerita Creek within the northwestern portion of the study area, adjacent to California buckwheat scrub. The dominant species is giant reed, which forms a dense herbaceous layer to the exclusion of all other species.

This vegetation community does not contain suitable habitat for burrowing owl.

Riverwash

This community is located within an open, unvegetated or sparsely vegetated channel of Placerita Creek that is maintained by scouring from intermittent stream flows. The substrate is comprised of gravel, cobble, sand, and scattered woody debris in the main channel, with finer silty soils and sparse annual grass and shrub cover on lower terraces. Commonly encountered plant species include native shrubs such as mulefat (*Artemisia douglasii*) and Palmer's goldenbush (*Ericameria palmeri* var. *pachylepis*), as well as a variety of herbaceous species, such as annual burweed (*Ambrosia acanthicarpa*) and telegraph weed (*Heterotheca grandiflora*), and tree tobacco (*Nicotiana glauca*) and tree of heaven (*Ailanthus altissima*); however, these species appear to be temporary inhabitants that do not persist for long periods due to annual flooding episodes. Riverwash is a naturally dynamic habitat and may shift and change position within drainages, depending on flood volumes and regularity.

This vegetation community does not contain suitable habitat for burrowing owl.

Summary of Findings

The study area was assessed for potential for western burrowing owl to occur. Suitable habitat was determined to be present. Therefore, a focused burrow survey and focused burrowing owl surveys were conducted.

As described in Table 1, the habitat assessment was conducted on April 7, 2022. Suitable habitat was determined to be present on site; therefore, the focused burrow survey was also conducted on April 7, 2022. Potentially suitable California ground squirrel burrows were observed; therefore, three subsequent focused breeding season owl surveys were conducted according to the CDFW burrowing owl survey protocol. Numerous California ground squirrel burrows were observed within the wild oat grassland on the project site as shown on Figure 3.

No western burrowing owls or burrowing owl sign indicating owl activity were observed within the study area. Locations of suitable habitat and existing land cover types observed during the surveys are shown in Figure 3 and Figure 4, respectively. Overall avian activity was moderate during the surveys and many common species expected to occur within a residential or urbanized region were observed foraging, perching, and/or soaring over the project site (Table 2). Representative site photographs are included in Attachment 2. Burrowing owl were not observed during the surveys but could occupy the project site in the future. The closest documented occurrences are located approximately 3.5 miles from the project site, one to the northwest and another to the east (CDFW 2022c). The project site is disturbed, though it appears to be mostly in the southern portion. No burrowing owl sign, either recent or historic, was observed at any of the California ground squirrel burrows throughout the project site; however, due the high density of squirrels, the site does provide a substantial food source for the species.

Table 2 Wildlife Species Observed

Scientific Name	Common Name
Birds	
Buteo jamaicensis	red-tailed hawk
Calypte anna	Anna's hummingbird
Corvus corax	common raven

Falco sparverius	American kestrel
Haemorhous mexicanus	house finch
Hirundo rustica	barn swallow
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Mimus polyglottos	northern mockingbird
Sayornis nigricans	black phoebe
Streptopelia decaocto	Eurasian collared-dove
Tyrannus verticalis	western kingbird
Zenaida macroura	mourning dove
Zonotrichia leucophrys	white-crowned sparrow
Mammals	
Otospermophilus beecheyi	California ground squirrel
Sylvilagus audubonii	desert cottontail

Conclusion

Potentially suitable California ground squirrel burrows and burrow complexes were observed during the focused burrow survey. Therefore, four focused burrowing owl surveys were conducted in accordance with CDFW guidelines. No burrowing owls or sign were observed within the study area; however, there is potential for burrowing owl to occupy the project site in the future. While no burrowing owl sign, either recent or historic, was observed at any of the California ground squirrel burrows throughout the project site, the amount of suitable prey and distance to recorded occurrences make the project site suitable for owls to occupy in the future.

Sincerely,
Rincon Consultants, Inc.

Amy Leigh Trost
Biologist

Greg Ainsworth
Director of Natural Resources

Attachments

Attachment 1 Figures
Attachment 2 Representative Photographs

References

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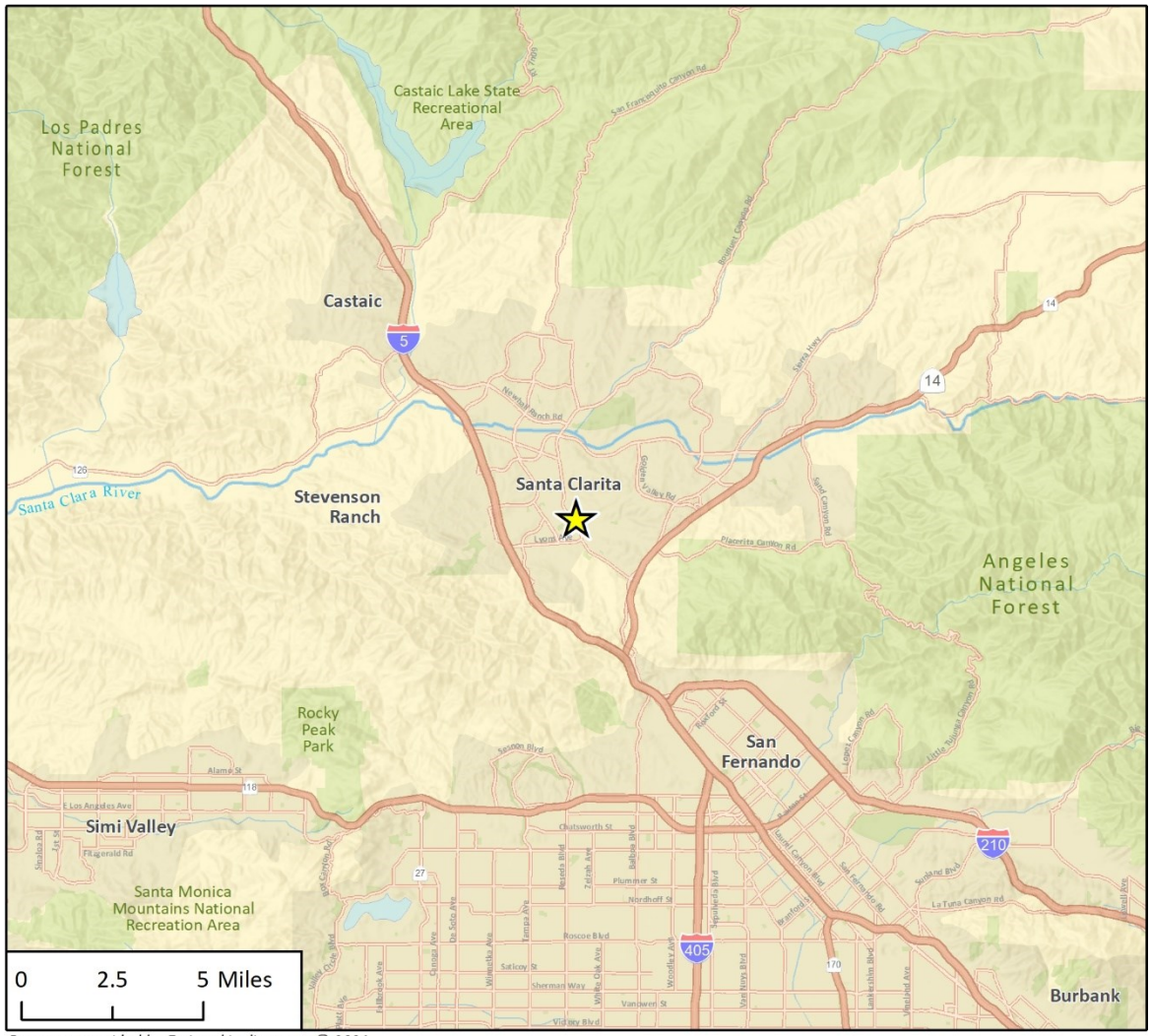
Attachment 1

Figures

Figure 1 Regional Location



Basemap provided by Esri and its licensors © 2021.

Project Location

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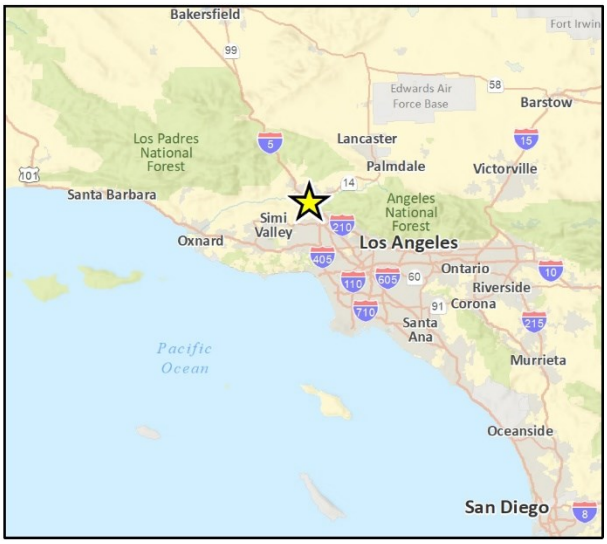

Figure 2 Project Boundary

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Figure 3 Burrowing Owl Habitat and Potential Burrows

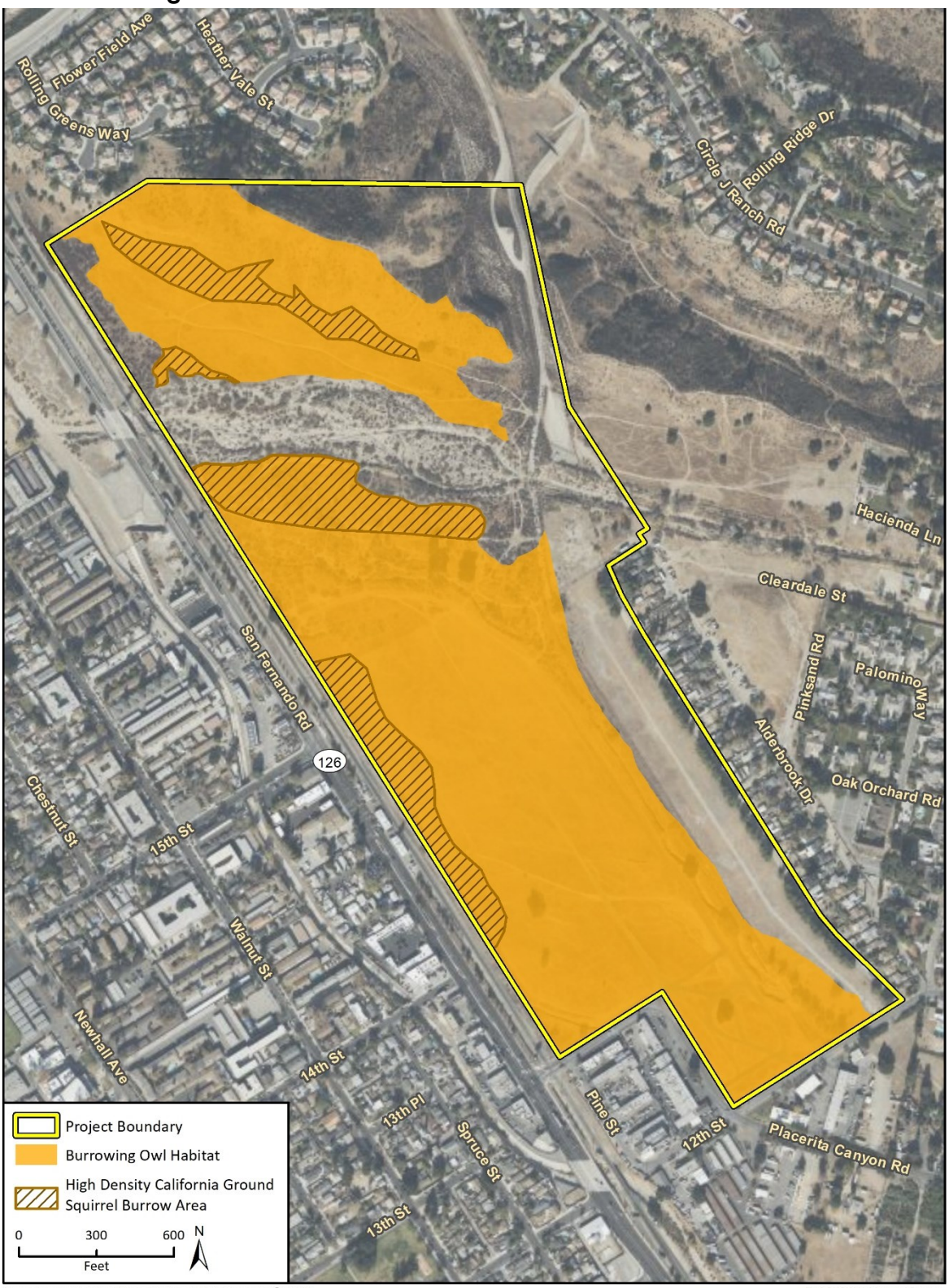

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Fig 3 BUOW Habitat and Burrows

Figure 4 Vegetation Communities

Vegetation Community	Temporary Impact	Permanent Impacts
Big Sagebrush Scrub	0	1.39
California Buckwheat Scrub	2.13	8.86
Chamise-California Buckwheat Scrub	0	0.61
Disturbed	0	14.6
Giant Reed Break	0.04	0.01
Scale Broom Scrub	0.57	0.002
Wild Oat-Annual Brome Grassland	0.37	62.42
Total	3.11	87.89

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Fig 3 Vegetation 20220803

Attachment 2

Representative Photographs

Photograph 1. View of suitable burrowing owl habitat in the southeastern portion of the site, facing north.

Photograph 2. View of suitable burrowing owl habitat in the northern portion of the site, facing west.

Photograph 3. View of suitable burrowing owl habitat in the northwestern portion of the site, facing southeast.

Photograph 4. Overview of project site from hillside in the north, facing south.

Appendix I

Coastal California Gnatcatcher Focused Survey Report

Blackhall Property Project

Coastal California Gnatcatcher Focused Survey Report

prepared for

Blackhall Studios
Jeff Weber
1415 Constitution Road SE
Atlanta, Georgia 30316
Via email: jeff@JWeberGroup.com

Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, California 93003

prepared by

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

May 26, 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Table of Contents

Tables

Figures

Appendices

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1 Introduction

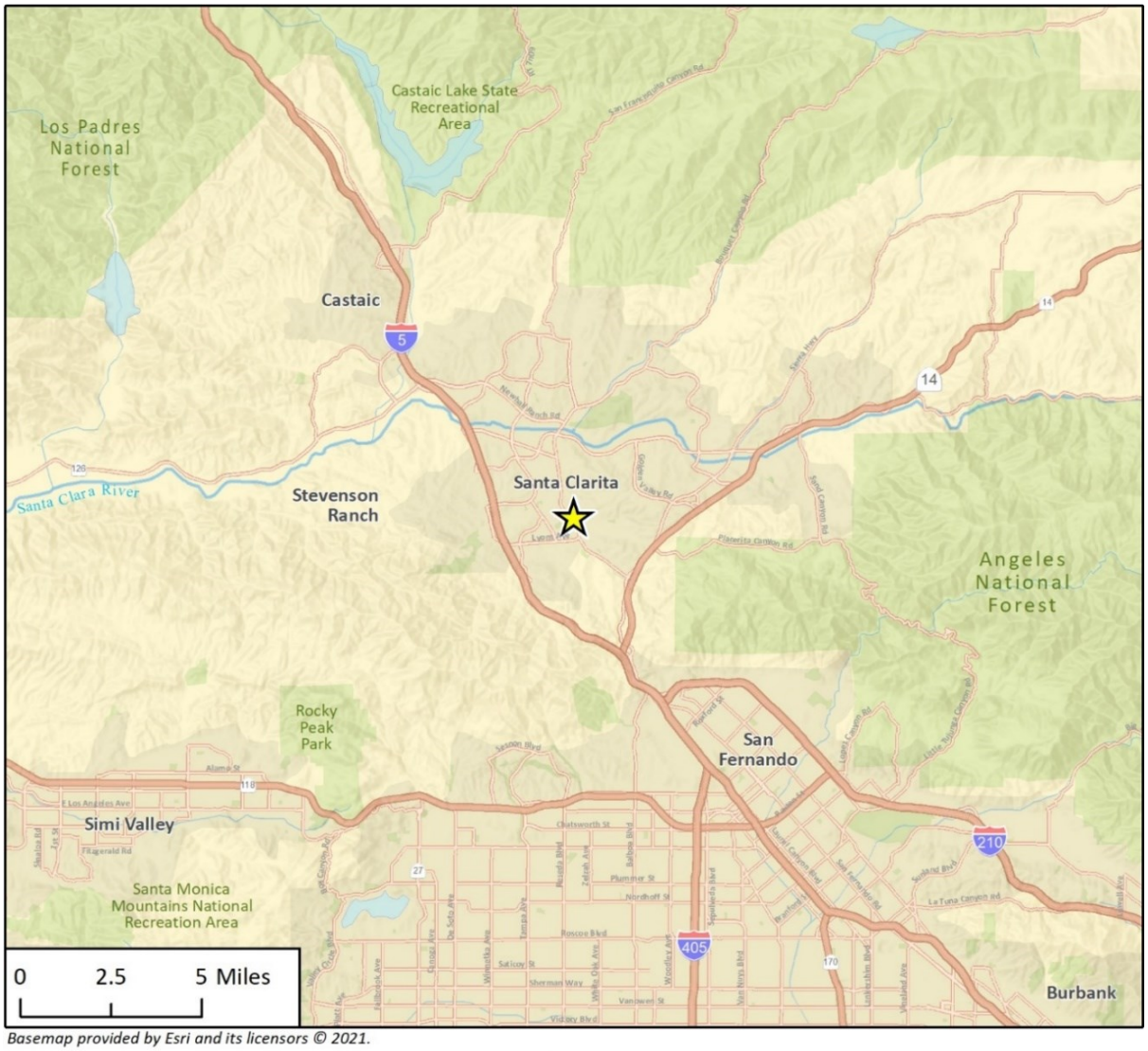
Rincon Consultants, Inc. (Rincon) herein presents the results of focused breeding season surveys for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*; CAGN). The surveys were conducted for Blackhall Studios for the Blackhall Property Project (project), and for compliance with the U.S. Fish and Wildlife Service (USFWS) Section 10(a) of the Federal Endangered Species Act (FESA), Special Terms and Conditions for Endangered and Threatened Wildlife Species Permit.

The proposed project is a state-of-the-art, full-service film and television studio campus that is planned for the currently vacant 93.5-acre parcel of land situated at the northeast corner of Railroad Avenue and 13th Street. The campus has been strategically designed to provide on-site integration of all the diverse functions required in the production process

The project site is located within the Santa Clarita Valley in the City of Santa Clarita, Los Angeles County, California (Figure 1). The project is located on an approximately 93.5-acre parcel in an urbanized area in the southern portion of the city (Figure 2). The approximate center of the parcel is at latitude 34.388431 °N and longitude 118.531656 °W. The Public Land Survey depicts the parcel in Township 4 North, Range 17 West (San Bernardino baseline and meridian) within the Newhall, California 7.5-minute topographic quadrangle (USGS 2018). Railroad Avenue runs parallel to the western boundary of the parcel and 12th Street is adjacent to the southern boundary. Placerita Creek bisects the northern portion of the parcel. The site does not occur in federally designated critical habitat for the CAGN.

The CAGN survey area covered 15.47 acres of suitable habitat for CAGN and included a 100-foot buffer surrounding the suitable habitat. All surveys for the CAGN were conducted by Rincon biologist Kelly Rios under USFWS permit number TE-018909-5.

Figure 1 Regional Location



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Project Location

N

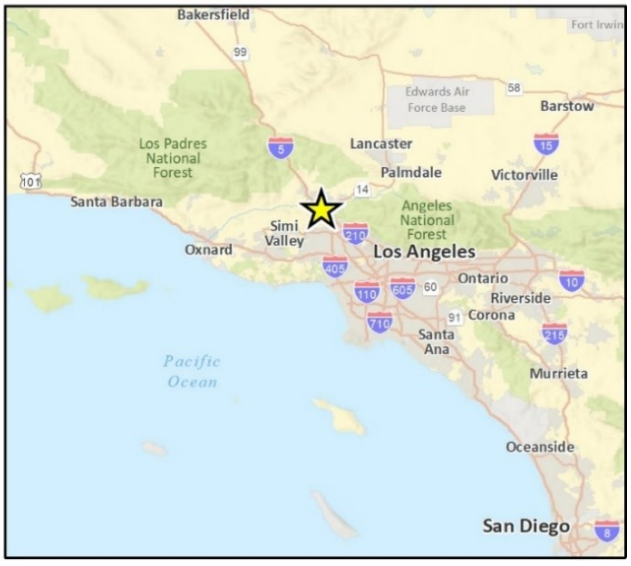
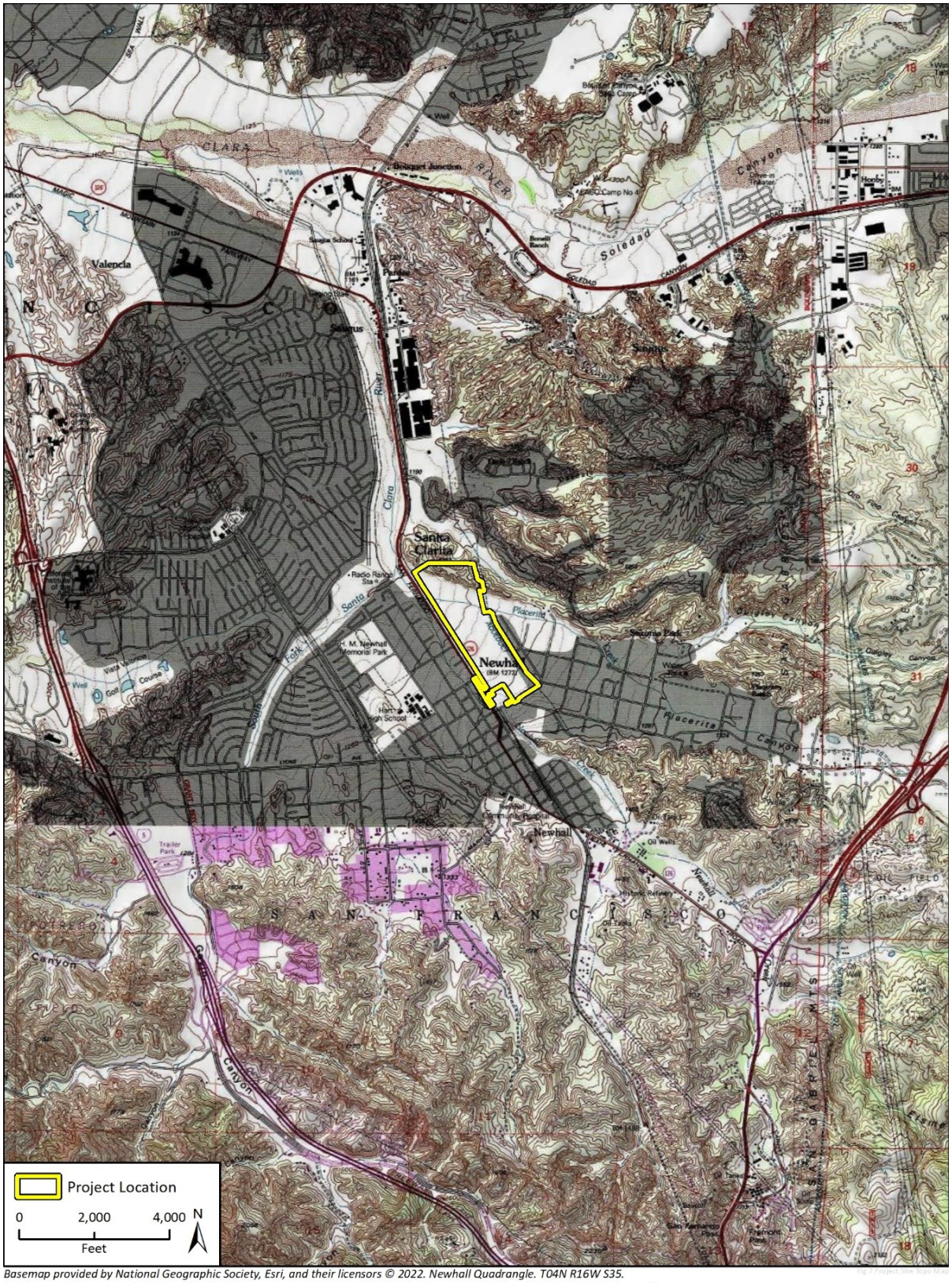


Figure 2 Project Location



Basemap provided by National Geographic Society, Esri, and their licensors © 2022. Newhall Quadrangle. T04N R16W S35.
The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

2 Methodology

Notification to commence protocol surveys for CAGN was submitted to the USFWS Ventura Field Office via email on March 31, 2022, by Kelly Rios. Breeding season surveys were conducted pursuant to Section IV of the USFWS *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Protocol*, issued February 28, 1997, and revised July 28, 1997 (USFWS 1997).

The CAGN survey area covered 15.47 acres and included all suitable habitat for CAGN comprised of 7.03 acre of big sagebrush scrub, 3.43 acres of California buckwheat scrub, and 5.01 acres of chamise-California buckwheat scrub. The survey area also included a 100-foot buffer surrounding the suitable habitat. In total, the CAGN survey area encompassed 47.73 acres mostly concentrated in the northern portion of the project site as displayed on Figure 3.

The survey window was within the breeding season (March 15 - June 30), and six surveys were completed at least one week apart during this time. The surveys occurred between 0700 and 1200 hours. Surveys were not conducted during inclement weather conditions (e.g., excessive or abnormal heat, wind, rain, fog). Survey dates and conditions are further details in Section 5.

Linear transects were walked throughout the survey area, stopping at approximate 50-foot intervals to play an audio recording of CAGN vocalizations. Binoculars were used to aid in observing habitat for CAGN and other avian species. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response. If any CAGNs were observed, the age, sex, breeding status, and behavioral characteristics were documented, when possible. A list of all observed avian species detected was compiled.

Figure 3 California Gnatcatcher Survey Area Map

Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided by USGS, 2022.

Fig 3 CAGN Survey Area

3 Environmental Setting

There are six vegetation communities and land cover types within the project area that consist of native vegetation communities including big sagebrush scrub, California buckwheat scrub, chamise-california buckwheat scrub, and scale broom scrub; and non-native communities consisting of wild oat grassland and giant reed break. In addition, anthropogenic land covers consisting of disturbed areas are present within the project site. The native vegetation communities that have potential to support CAGN are further described below.

3.1 Big Sagebrush Scrub (*Artemisia tridentata* ssp. parishii Provisional Shrubland Association)

Big sagebrush scrub is typically found within plains, alluvial fans, bajadas, pediments, lower slopes, valley bottoms, hills, ridges, seasonal and perennial stream channels, and dry washes between 984-9,840 feet (30-3,000 meters) in elevation. Big sagebrush (*Artemisia tridentata* ssp. *parishii*) constitutes at least 2 percent absolute cover in the shrub layer, with no other single species with greater cover.

This vegetation community is found in several distinct patches south of Placerita Creek. Soils consist of coarse sand. Big sagebrush (*Artemisia tridentata* ssp. *parishii*) is dominant in the open shrub layer, with California buckwheat and California sagebrush commonly present. The herbaceous layer is sparse and dominated by black mustard. This community appears to have been fragmented by previous off-highway vehicle usage.

3.2 California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)

California buckwheat scrub is typically found within upland slopes, intermittently flooded arroyos, channels, and washes, and rarely within flood low-gradient deposits between sea level and 3,940 feet amsl. Soils within this vegetation community are typically coarse, well-drained, and moderately acidic to slightly saline. California buckwheat comprises at least 50 percent relative cover in the shrub layer.

This vegetation community is found along the western boundary of the parcel. California buckwheat is dominant in the open shrub layer, along with California sagebrush and deerweed (*Acmispon glaber*) present as subdominant species. The herbaceous layer is dominated by wild oats, black mustard, and cheat grass.

4 Species Background

The CAGN belongs to the old-world warbler and CAGN family, Sylviidae. It is a small blue-gray songbird that measures 4.5 inches and weighs 0.2 ounces. It has dark blue-gray feathers on its back and grayish-white feathers on its underside. The wings have a brownish wash to them. Its long tail is mostly black with white outer tail feathers, and the species has a thin, small bill. The males have a black cap during the spring and summer that is absent in the winter. Both males and females have white rings around their eyes.

The CAGN is a non-migratory songbird found on the coastal slopes of southern California. It ranges from Ventura County south to northwest Baja California, Mexico (Atwood et al. 1999; Jones and Ramirez 1995). It is strongly associated with coastal sage scrub habitats below 820 feet elevation in coastal areas, and between 820 and 1,640 feet in inland areas (Atwood and Bolsinger 1992); however, not all types of coastal sage scrub communities are used or preferred. This species appears to be most abundant in areas dominated by California sagebrush and California buckwheat. CAGN numbers are generally low in coastal habitats dominated by black sage (*Salvia mellifera*), white sage (*Saliva apiana*), or lemonade berry (*Rhus integrifolia*). In inland areas, habitats dominated by black sage may be used more regularly (Atwood and Bontrager 2001).

The breeding season of the CAGN extends from late February through August with peak nesting occurring from mid-March through mid-May. The breeding territory size of the CAGN ranges from 2 to 22 acres, with home ranges expanding up to 39 acres, during the non-breeding season (Bontrager 1991; USFWS 1993). Nest parasitism by brown-headed cowbirds (*Molothrus ater*) has been documented (Unitt 1984). Typically, there is a high rate of nest failure each breeding season. This is offset by rapid and persistent re-nesting efforts; a breeding pair may attempt to nest as many as 10 times in a year, producing up to three successful broods in a season (Atwood and Bontrager 2001). There is evidence that this species is also susceptible to nest predation by various animals such as snakes, coyote (*Canis latrans*), foxes, rodents, and other birds, such as California scrub-jay (*Aphelocoma californica*) (Atwood et al. 1999).

Population estimates for the CAGN vary. In the 1980s and 1990s, qualitative estimates of the population size were made but were not based on rigorous sampling (USFWS 2010). At the time of listing in 1993, an estimated 2,562 CAGN pairs remained in the U.S., while about 2,800 pairs were reported in Baja California (USFWS 1993). In 1999, the USFWS estimated U.S. populations to be 2,735: San Diego County at 1,917 pairs, Orange County at 643 pairs, Los Angeles County at 144 pairs, San Bernardino County at 27 pairs, and Ventura County at 4 pairs (Atwood and Bontrager 2001). In a recent 2008 study (using methods supported by probability theory), an estimated 1,324 CAGN pairs were documented over a 111,006-acre area on public and quasi-public lands of Orange and San Diego counties (Winchell and Doherty 2008). The recent sampling timeframe covered only a portion of the U.S. range, focusing on the coast, and was limited to one year. It is not valid to extrapolate beyond the sampling frame, but it is likely there are more CAGNs in the U.S. portion of the range than previously estimated (USFWS 2010). CAGN population sizes are known to fluctuate from year to year (Atwood and Bontrager 2001), further complicating any trend assessment.

The CAGN is federally listed as threatened and is a California Department of Fish and Wildlife Species of Special Concern. The USFWS listed the CAGN as threatened pursuant to the FESA of 1973 as amended on March 30, 1993 (USFWS 1993). Critical habitat for the CAGN was designated on October 24, 2000 and revised on December 12, 2007 (USFWS 2007).

The CAGN's range and distribution is closely aligned with coastal sage scrub vegetation. The cumulative loss of coastal sage scrub vegetation to urban and agricultural development is the primary cause of this species' decline. Much of the species' current range in the U.S. is now or is anticipated to be covered by large, regional Habitat Conservation Plans permitted under section 10(a)(1)(B) of FESA and under the state of California's Natural Community Conservation Planning Act. Regional HCPs have greatly reduced the magnitude of threats to this species by directing development toward certain areas, while preserving core and linkage habitat areas (USFWS 2010).

5 Survey Results and Discussion

Survey dates, times, weather conditions, and results are listed in Table 1 below.

Table 1 Coastal California Gnatcatcher Survey Conditions and Results

Date	Biologist	Survey Conditions	CAGN Observed
4/15/22	Kelly Rios	0810-1030; 58-60°F, winds 2-3 mph, 0% clouds	No
4/22/22	Kelly Rios	0850-1100; 52-56°F, winds 1-2 mph, 10% clouds	No
4/29/22	Kelly Rios	1010-1200; 72-75°F, winds 2-3 mph, 0% clouds	No
5/6/22	Kelly Rios	0930-1130; 78-79°F, winds 1-2 mph, 0% clouds	No
5/13/22	Kelly Rios	0915-1110; 77-79°F, winds 1-2 mph, 0% clouds	No
5/20/22	Kelly Rios	0930-1130; 64-67°F, winds 2-3 mph, 100%	No

No CAGN were observed or otherwise detected during the breeding season protocol surveys.

The survey area consisted of big sagebrush scrub and California buckwheat scrub, which are considered suitable habitat for CAGN. Although big sagebrush is not a typical sage species (*Artemisia*) that CAGN are commonly found in, it was considered suitable habitat due the presence of California buckwheat and California sagebrush.

Overall avian activity and diversity was relatively low during the surveys. Brown-headed cowbirds (*Molothrus ater*), considered to be a nest parasite to CAGNs and other avian species, were not observed in or near the survey area over the course of the surveys. Appendix A provides a complete list of avian species detected or observed in the survey area during the surveys.

6 Certification

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed:  Date: May 26, 2022

Kelly Rios
Senior Biologist
TE-018909-5

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Appendix A

Avian Species Observed/Detected in the Survey Area

Avian Species Observed/Detected in the Survey Area

Family Scientific Name	Common Name
Odontophoridae	**Fowl-like Birds**
Callipepla californica	California quail
Accipitridae	**Hawks**
Buteo jamaicensis	red-tailed hawk
Cathartidae	**Vultures**
Cathartes aura	turkey vulture
Columbidae	**Pigeons & Doves**
Zenaida macroura	mourning dove
Cuculidae	**Cuckoos and Roadrunners**
Geococcyx californianus	greater roadrunner
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Apodidae	**Swifts**
Aeronautes saxatalis	white-throated swift
Hirundinidae	**Swallows**
Hirundo rustica	barn swallow
Picidae	**Woodpeckers**
Dryobates nuttallii	Nuttall's woodpecker
Tyrannidae	**Tyrant Flycatchers**
Myiarchus cinerascens	ash-throated flycatcher
Sayornis nigricans semiatra	black phoebe
Sayornis saya	Say's phoebe
Tyrannus verticalis	western kingbird
Corvidae	**Crows, Jays, and Magpies**
Aphelocoma californica	California scrub jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Sturnidae	**Starlings**
Sturnus vulgaris	European starling
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Troglodytidae	**Wrens**
Thrynomanes bewickii	Bewick's wren
Chamaea fasciata	wrentit
Polioptilidae	**Gnatcatchers**
Polioptila caerulea	blue-gray gnatcatcher
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	northern mockingbird
Toxostoma redivivum	California thrasher

Family Scientific Name	Common Name
Bombycillidae	**Waxwings**
Bombycilla cedrorum	cedar waxwing
Ptiliogonatidae	**Silky-Flycatchers**
Phainopepla nitens	phainopepla
Passerellidae	**Sparrows**
Aimophila ruficeps	rufous-crowned sparrow
Melospiza melodia	song sparrow
Zonotrichia leucophrys	white-crowned sparrow
Emberizidae	**Emberizids**
Melozone crissalis	California towhee
Pipilo maculatus	spotted towhee
Cardinalidae	**Buntings**
Passerina amoena	lazuli bunting
Fringillidae	**Finches**
Carpodacus mexicanus	house finch
Spinus psaltria	lesser goldfinch