

EXECUTIVE SUMMARY

1. PURPOSE

The intent of the Executive Summary is to provide the reader with a clear and simple description of the proposed project and its potential environmental impacts. Section 15123 of the State California Environmental Quality Act (CEQA) Guidelines requires that the summary identify each significant effect, recommended mitigation measure(s), and alternatives that would minimize or avoid potential significant impacts. The summary is also required to identify areas of controversy known to the lead agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects. This section focuses on the major areas of the proposed project that are important to decision makers and utilizes non-technical language to promote understanding.

2. SITE LOCATION AND DESCRIPTION

The project site is located in unincorporated Los Angeles County, directly adjacent to the City of Santa Clarita, and in the Santa Clarita Valley Planning Area. The Santa Clarita Valley Planning Area is generally surrounded by the Los Padres and Angeles National Forest areas to the north; Agua Dulce and the Angeles National Forest to the east; the major ridgeline of the Santa Susana Mountains, which separates Santa Clarita Valley from the San Fernando and Simi Valleys, to the south; and, the County of Ventura to the west.

The project site is located immediately south of State Route 14 (SR-14), west of La Veda Avenue, north of the Metrolink rail line, and east of the Colony Townhome community. The site also includes a segment of the Santa Clara River.

3. PROJECT DESCRIPTION

The project applicant proposes to develop the approximately 185-acre Vista Canyon project site. The land uses proposed include 1,117 dwelling units (96 single-family residential lots and 1,021 attached condominiums [up to 579 of these attached condominium units may be rented or leased]), and up to 950,000 square feet of commercial and medical office, retail, theater, restaurant, and hotel uses within four Planning Areas (PA). A residential overlay over the corporate office campus site within PA-2, more specifically lots 32-35, would allow for the conversion of up to 250,000 square feet of office floor area to 233 attached residential units. If implemented, this conversion would permit a maximum of 1,350 residential units and 700,000 square feet of commercial floor area.

The project also includes approximately 18 acres of parks/recreation facilities, including the Oak Park, Town Green, Community Garden, River Education/Community Center, private recreation facilities, and project trails. Up to six private recreational facilities would be constructed throughout the site. Further, there are approximately 10 acres of proposed public streets, including the extension of Lost Canyon Road from Fair Oaks Ranch to Vista Canyon Road and the construction of the Vista Canyon Road Bridge to connect Lost Canyon Road and Soledad Canyon Road. Various other off-site improvements would be necessary to implement the project. These improvements are described below:

- The extension of Lost Canyon Road (approximately 800 feet), from its present terminus at the northerly abutment of the bridge over the Metrolink railroad tracks within Fair Oaks Ranch, across adjacent properties to the project site. The right-of-way for this road is proposed at 95 feet, which would accommodate two vehicular lanes in each direction, a raised landscaped median, parkway, sidewalk and Class III bike lanes.
- The extension of Jakes Way (approximately 250 feet), from its present terminus directly west of the project site, to the proposed roundabout at Lost Canyon Road and Jakes Way. The right-of-way for this road is proposed at 92 feet, which would accommodate one vehicular lane in each direction, parkway, sidewalk and Class III bike lanes.
- Grading on portions of the adjacent southerly property for slope and drainage purposes.
- Extension of the Santa Clara River Regional Trail easterly from the project site along Lost Canyon Road to Sand Canyon Road. This trail, up to 10-foot-wide, would consist of decomposed granite or a similar surface, and include a pedestrian bridge crossing over the Sand Canyon wash.
- The widening and completion of roadway improvements on Lost Canyon Road under SR-14 within the existing right-of-way. This roadway is presently partially improved and used for public access. Proposed improvements would include the addition of pavement, curb, gutter, and sidewalk (east side).
- The import of up to 500,000 cubic yards of dirt from one or both of the following borrow sites: (a) the George Carvalho Santa Clarita Sports Complex; and (b) the Center Pointe Business Park. Development on both of the borrow sites was previously approved.
- Construction of the platform and accessory station improvements within the Metrolink right-of-way as part of a new City/Metrolink transit center.
- Grading and various trail and drainage improvements within the Metrolink right-of-way adjacent to the project site.
- Construction of various off-site traffic mitigation improvements discussed in further detail in **Section 4.3, Traffic and Access**, of this Draft Environmental Impact Report (EIR).

The applicant also is proposing construction of a water reclamation plant, located adjacent to the western project boundary and directly north of Lost Canyon Road, which would provide recycled water for use in the project's landscaped areas and toilets within public restroom areas in commercial areas of the project.

A surplus supply of recycled water would be created by the project and would initially be discharged into on-site percolation basins and ultimately utilized by the Castaic Lake Water Agency (CLWA) as part of its recycled water system.

The project also proposes to annex to the City various properties surrounding and including the Vista Canyon project site, which currently are located under the jurisdiction of the County of Los Angeles. In total, the annexation area includes approximately 3,250 acres, including the Vista Canyon project site (approximately 185 acres), Fair Oaks Ranch (approximately 1,082 acres), Jakes Way multi-family area (approximately 260 acres), and the Sand Canyon area (approximately 1,723 acres). Annexation of non-Vista Canyon site areas would require approval of the following entitlements: (a) Pre-Zone No. 07-001b; General Plan Amendment No. 07-001b; and Annexation No. 07-002b (including an amendment to the City's Sphere of Influence). **Section 4.24** of the EIR analyzes the environmental impacts associated with the annexation of the properties surrounding the Vista Canyon site.

The project applicant is requesting approval of the following discretionary entitlements to allow for construction of the Vista Canyon project site: (a) General Plan Amendment No. 07-001a; (b) Pre-Zone No.07-001a; (c) Annexation No. 07-002a (including an amendment to the City's Sphere of Influence); (d) Specific Plan No. 07-001; (e) Tentative Tract Map No. 69164; (f) Conditional Use Permit No. 07-009; and (g) Oak Tree Permit No. 07-019. These project approvals are discussed in further detail in **Section 1.0, Project Description**, of this EIR. Additional subsequent ministerial actions, such as grading permits, building plan review and building permits, also would be required by the City prior to actual grading and construction of the proposed Vista Canyon project.

4. TOPICS OF KNOWN CONCERN

Issues relative to the scope of this EIR were identified by the City through input received from state and local agencies, private organizations, and members of the public. By way of example, the City's Community Development Department Planning staff circulated the initial Notice of Preparation (NOP) for a 30-day review period from July 11, 2007 to August 10, 2007. Revised NOPs were circulated from February 26, 2008 to March 21, 2008, and October 1, 2009 to November 2, 2009, due to revisions to the project. These NOPs were circulated pursuant to the requirements of the *State CEQA Guidelines*, in order to solicit input from responsible and interested public agencies and the community regarding the content of the EIR. Copies of the NOPs are included in **Appendix I** of this EIR. Copies of all written letters submitted in response to the NOPs are also included in **Appendix I** of this EIR. In addition, to facilitate local participation, the City held a scoping meeting on the project and solicited suggestions from the public and other agencies on the scope and content of this Draft EIR. The meeting took place at the Century Room at the Santa Clarita City Hall 23920 Valencia Boulevard, Santa Clarita, California, on February 27, 2008.

Several subject areas of concern were raised in the comments submitted on the NOP and at the Public Scoping Meeting. These subject areas include (a) hazards (geotechnical, flood, and noise); (b) resources (water quality, air quality, biological, cultural resources, agricultural resources, and visual resources/aesthetics); (c) services (transportation/circulation, sewage disposal, education, fire/sheriff and utilities); and (d) other categories (general, environmental safety/hazardous materials, land use and demand for new recreation facilities). These concerns are addressed in this EIR under one or more of the topics shown below:

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| 1. Geotechnical Hazards | 13. Fire Services |
| 2. Flood | 14. Sheriff Services |
| 3. Traffic and Access | 15. Human Made Hazards |
| 4. Air Quality | 16. Visual Resources |
| 5. Noise | 17. Population, Housing, and Employment |
| 6. Biological Resources | 18. Cultural Resources |
| 7. Land Use | 19. Agricultural Resources |
| 8. Water Service/Water Quality | 20. Santa Clara River Corridor Analysis |
| 9. Solid Waste Disposal | 21. Wastewater Disposal |
| 10. Education | 22. Global Climate Change |
| 11. Library Services | 23. Utilities |
| 12. Parks and Recreation | 24. Ancillary Annexation Area |

Issues to be resolved include whether to approve the proposed project, whether or how to mitigate the identified significant project and cumulative impacts, and whether to select one of the project alternatives.

5. ALTERNATIVES

The proposed project evaluated six on-site alternatives. These alternatives were selected based on the significant impacts of the proposed project, the basic objectives of the project, the comments received in response to the NOPs, and discussions with City staff, the public, and other public agencies. No other alternatives were identified or rejected as infeasible during the City's EIR process. The six alternatives evaluated in **Section 6.0** of this EIR include:

Alternative 1, No Project Alternative. This alternative is required by the *State CEQA Guidelines* and compares the impacts that might occur if the site is left in its present condition with those that would be generated by the proposed project. Under this alternative, no development would occur, and the existing storage yard and residence would remain on a portion of the project site.

Alternative 2, Proposed County Land Use Designation (OVOV). This alternative would develop a project consistent with the densities permitted by Los Angeles County's proposed land use designation for the site, as defined in the draft General Plan Update (One Valley One Vision [OVOV]). The proposed designation would permit approximately 700 residential units on the project site; a 5-acre neighborhood park and up to two private recreation areas also would be provided. However, no commercial or transit uses would be constructed as part of this alternative. Additionally, this alternative would not include the water reclamation plant or Vista Canyon Road Bridge. Consistent with OVOV, Lost Canyon Road would be extended as a major highway from Fair Oaks Ranch to Jakes Way, and then as a secondary highway from Jakes Way to Sand Canyon Road.

Alternative 3, Existing City of Santa Clarita General Plan Designation. This alternative would develop a project allowed by the City of Santa Clarita's existing General Plan land use designation for the site (i.e., Business Park [BP]). Under the BP designation, the site could be developed with approximately 4.35 million square feet of light industrial/business park uses. This alternative would include construction of the Vista Canyon Road Bridge, Metrolink Station, and Bus Transfer Station. Lost Canyon Road would be extended from Fair Oaks Ranch to Lost Canyon Road at La Veda Avenue as a major highway. This alternative would not include any parks or recreation facilities.

Alternative 4, Reduced Development Footprint (Relocation of Southerly Bank Stabilization). This alternative generally would move the bank stabilization on the south side of the River Corridor back or south by an average of 100 feet, thereby increasing the width of the River Corridor and reducing the development footprint as compared to the proposed project. The Vista Canyon Road Bridge length would be extended from 650 to 800 feet. The residential overlay also would be eliminated, reducing the number of residential units from a maximum of 1,350 to 1,100. Lost Canyon Road would be extended from Fair Oaks Ranch to La Veda Avenue in a design (with traffic calming) similar to the proposed project. All other components of the proposed project would be incorporated into this alternative.

Alternative 5, Open Space Corridor Alternative. This alternative would create a north/south open space corridor from and through the project site to undeveloped properties to the south, and would not include development in PA-4 (Mitchell Hill). The alternative also would eliminate the extension of Lost Canyon Road to La Veda Avenue; Lost Canyon Road would terminate in the project site, though the alternative would still extend trail improvements from the project site along the north side of Lost Canyon Road to Sand Canyon Road. The alternative would increase the size of Oak Park (which would include both active and passive areas) and would remove one less oak tree, as compared to the proposed project. In comparison to the proposed project, 32 single-family units and the residential overlay would be eliminated, resulting in a maximum of 1,085 residential units. All other components of the proposed project would be incorporated into this alternative.

Alternative 6, Lost Canyon Road Alignment (parallel and adjacent to the southerly bank stabilization).

This alternative would extend Lost Canyon Road from Fair Oaks Ranch to La Veda Avenue in an alignment running parallel and adjacent to the southerly bank stabilization. Lost Canyon Road would be constructed to serve as a secondary highway to the Vista Canyon Road Bridge, and as a collector through the eastern portions of the project site. All other components of the proposed project would be incorporated into this alternative.

Alternative 1 would not result in significant effects; therefore, that alternative is the environmentally superior alternative. However, Alternative 1 would not fully meet or would impede most of the land use planning and economic project objectives.

As specified in the *State CEQA Guidelines* (Section 15126(d)(2)), if the No Project Alternative is the environmentally superior alternative, the EIR shall identify an environmentally superior alternative among the other alternatives. Amongst the remaining project alternatives, Alternative 2 is considered to be the "environmentally superior" alternative for purposes of CEQA. Alternative 2, which would develop the property consistent with the density permitted under the proposed County Land Use designation in OVOV, would reduce the number and extent of environmental impacts associated with the proposed project. However, like Alternative 1, this alternative would not fully meet or would impede most of the land use planning and economic project objectives.

6. SIGNIFICANT IMPACTS/MITIGATION MEASURES

This EIR has been prepared to assess each potentially significant impact to the environment as a result of the implementation of the proposed project. For a detailed discussion regarding potential impacts, refer to **Section 4.0, Environmental Impact Analysis**, of this EIR.

A summary of the proposed project's significant impacts by environmental topic is provided in **Table ES-1, Summary of Significant Impacts and Mitigation Measures**. Also provided in **Table ES-1** is a list of the mitigation measures proposed by this EIR and a determination of the level of significance of each impact after implementation of the mitigation measures.

**Table ES-1
Summary of Significant Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS		
<p>Due to the presence of shallow groundwater and liquefiable soils, the project site could be susceptible to liquefaction. Soils on the project site are also subject to lateral spreading, and exhibit corrosive and expansive properties. The project site also may be subject to ground shaking due to its location within a seismically active region. With implementation of certain grading and construction techniques, these significant impacts would be reduced to a less than significant level.</p>	<p>4.1-1 Grading: The applicability of the preliminary recommendations for foundation and retaining wall design shall be confirmed at the completion of grading. Paving studies and soil corrosivity tests shall be performed at the completion of rough grading to develop detailed recommendations for protection of utilities, structures, and for construction of the proposed roads.</p> <p>4.1-2 Site Preparation: Prior to performing earthwork, the existing vegetation and any deleterious debris shall be removed from the site. Existing utility lines shall be relocated or properly protected in place. All unsuitable soils, uncertified fills, artificial fills, slopewash, upper loose terrace deposits, and upper loose alluvial soils in the areas of grading receiving new fill shall be removed to competent earth materials and replaced with engineered fill. The depth of removal and recompaction of unsuitable soils is noted in the Project Geotechnical Report. Any fill required to raise the site grades shall be properly compacted.</p>	<p>With implementation of the identified mitigation measures, the proposed project's geotechnical hazards would be mitigated to a level below significant, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-3 Removal Depths: The required depth of removal and recompaction of the existing compacted fill or natural soils are indicated in the Project Geotechnical Report. Deeper removals shall be required if disturbed or unsuitable soils are encountered during project grading as directed by the Project Geotechnical Consultant. After excavation of the upper natural soils on hillsides and in canyons, further excavation shall be performed, if necessary, and as directed by the Project Geotechnical Consultant, to remove slopewash or other unsuitable soils. Additional removals will also be required for transition lots (a transition lot occurs on a graded pad where relatively shallow or exposed bedrock materials and compacted fills soils are both present on a lot.) and where expansive bedrock occurs as directed by the Project Geotechnical Consultant. The Project Geotechnical Consultant may require that additional shallow excavations be made periodically in the exposed bottom to determine that sufficient removals have been made prior to recompacting the soil in-place. Deeper removals may be required by the Project Geotechnical Consultant based on observed field conditions during grading. During grading operations, the removal depths shall be observed by the Project Geotechnical Consultant and surveyed by the Project Civil Engineer for conformance with the recommended removal depths shown on the grading plan.</p> <p>4.1-4 Material for Fill: The on-site soils, less any debris or organic matter, may be used in the required fills. Any expansive clays shall be mixed with non-expansive soils to result in a mixture having an expansion index less than 30 if they are to be placed within the upper 8 feet of the proposed rough grades. Rocks or hard fragments larger than 4 inches shall not be clustered or compose more than 25 percent by weight of any portion of the fill or a lift. Soils containing more than 25 percent rock or hard fragments larger than 4 inches must be removed or crushed with successive passes (e.g., with a sheepsfoot roller) until rock or hard fragments larger than 4 inches constitute less than 25 percent of the fill or lift.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-5 Oversized Material: Rocks or hard fragments larger than 8 inches shall not be placed in the fill without conformance with the following requirements: Rock or material greater than 8 inches in diameter, but not exceeding 4 feet in largest dimension shall be considered oversize rock. The oversize rocks can be incorporated into deep fills where designated by the Project Geotechnical Consultant. Rocks shall be placed in the lower portions of the fill and shall not be placed within the upper 15 feet of compacted fill, or nearer than 15 feet to the surface of any fill slope. Rocks between 8 inches and 4 feet in diameter shall be placed in windrows or shallow trenches located so that equipment can build up and compact fill on both sides. The width of the windrows shall not exceed 4 feet. The windrows shall be staggered vertically so that one windrow is not placed directly above the windrow immediately below. Rocks greater than 1 foot in diameter shall not exceed 30 percent of the volume of the windrows. Granular fill shall be placed on the windrow, and enough water shall be applied so that soil can be flooded into the voids. Fill shall be placed along the sides of the windrows and compacted as thoroughly as possible. After the fill has been brought to the top of the rock windrow, additional granular fill shall be placed and flooded into the voids. Flooding is not permitted in fill soils placed more than 1 foot above the top of the windrowed rocks. Where utility lines or pipelines are to be located at depths greater than 15 feet, rock shall be excluded in that area. Excess rock that cannot be included in the fill or that exceeds 4 feet in diameter shall be stockpiled for export or used for landscaping purposes.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-6 Import Material: Import material shall consist of relatively non-expansive soils with an expansion index less than 30. The imported materials shall contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. The import material shall be free of organic materials, debris, and rocks larger than 8 inches. A bulk sample of potential import material, weighing at least 25 pounds, shall be submitted to the Project Geotechnical Consultant at least 48 hours in advance of fill operations. All proposed import materials shall be approved by the Project Geotechnical Consultant prior to being placed at the site.</p> <p>4.1-7 Compaction: After the site is cleared and excavated as recommended, the exposed soils shall be carefully observed for the removal of all unsuitable material. Next, the exposed subgrade soils shall be scarified to a depth of at least 6 inches, brought to above optimum moisture content, and rolled with heavy compaction equipment. The upper 6 inches of exposed soils shall be compacted to at least 90 percent of the maximum dry density obtainable by the ASTM D 1557-02 Method of Compaction. After compacting the exposed subgrade soils, all required fills shall be placed in loose lifts, not more than 8 inches in thickness, and compacted to at least 90 percent of their maximum density. For fills placed at depths greater than 40 feet below proposed finish grade a minimum compaction of 93 percent of the maximum dry density is required. The moisture content of the fill soils at the time of compaction shall be above the optimum moisture content. Compacted fill shall not be allowed to dry out before subsequent lifts are placed. Rough grades shall be sloped so as not to direct water flow over slope faces. Finished exterior grades shall be sloped to drain away from building areas to prevent ponding of water adjacent to foundations.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-8 Shrinkage and Bulking: In computing fill quantities, about 10 to 15 percent shrinkage of the upper 5 feet is estimated for on-site natural alluvial soils, slopewash, and unsuitable soils. That is, it will require approximately 1.15 cubic yards of excavated alluvium to make 1 cubic yard of fill compacted to 90 percent of the maximum dry density. About 10 percent shrinkage of the alluvium between depths of about 5 to 10 feet is estimated, as well as 5 percent shrinkage below a depth of about 10 feet. Additional loss of material may be due to stripping, clearing, and grubbing. A bulking value of about 5 to 10 percent is anticipated for materials generated from the bedrock when placed as compacted fill. The removal of oversize material generated by excavation of the bedrock may affect volume losses.</p> <p>4.1-9 Temporary Slopes: For purposes of construction, the soils encountered at the site shall not be expected to stand vertically for any significant length of time in cuts 4 feet or higher. Where the necessary space is available, temporary unsurcharged embankments may be sloped back at a 1:1 without shoring, up to a height of 45 feet in competent bedrock with favorable bedding. Where any cut slope exceeds a height of 50 feet within competent bedrock, a bench at least 10 feet wide shall be located at mid-height. Within alluvial or compacted fill material, temporary excavations may be made at a 1.25:1 cut to a height of 25 feet. If the temporary construction embankments are to be maintained during the rainy season, berms are recommended along the tops of the slopes where necessary to prevent runoff water from entering the excavation and eroding the slope faces. Where sloped embankments are used, the tops of the slopes shall be barricaded</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-9 (continued) to prevent vehicles and storage loads within 5 feet of the tops of the slopes. A greater setback may be necessary when considering heavy vehicles, such as concrete trucks and cranes; in this case, the Project Geotechnical Consultant shall be advised of such heavy vehicle loads so that specific setback requirements can be established. All applicable safety requirements and regulations, including OSHA regulations, shall be met.</p> <p>4.1-10 Permanent Slopes: Permanent cut and fill slopes may be inclined at 2:1 or flatter. The current bulk grading plan indicates that the steepest slope to be constructed at the site during grading will be 2:1.</p> <p>4.1-11 Proposed Cut Slopes: Cut slopes proposed for the rough grading of the subject site have been designated as shown in the Project Geotechnical Report. Each cut slope is discussed with specific recommendations presented in the "Slope Stability Analyses" section of the Project Geotechnical Report. All grading shall conform to the minimum recommendations presented in the Project Geotechnical Report. If these slopes are modified from those that are discussed in the Project Geotechnical Report, the modifications shall be reviewed by the Project Geotechnical Consultant to ascertain the applicability of project recommendations or to revise recommendations. The cut slope designation, gradient, and proposed mitigation are summarized in the Project Geotechnical Report.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-12 Fill Slopes: If the toe of a fill slope terminates on natural, fill, or cut, a keyway is required at the toe of the fill slope. The keyway shall be a minimum width of 12 feet, be founded within competent material, and shall extend a horizontal distance beyond the toe of the fill to the depth of the keyway. The keyway shall be sloped back at a minimum gradient of 2 percent into the slope. The width of fill slopes shall be no less than 8 feet and under no circumstances shall the fill widths be less than what the compaction equipment being used can fully compact. Benches shall be cut into the existing slope to bind the fill to the slope. Benches shall be step-like in profile, with each bench not less than 4 feet in height and established in competent material. Compressible or other unsuitable soils shall be removed from the slope prior to benching. Competent material is defined as being essentially free of loose soil, heavy fracturing, or erosion-prone material and is established by the Project Geotechnical Consultant during grading.</p> <p>Where the top or toe of a fill slope terminates on a natural or cut slope and the natural or cut slope is steeper than a gradient of 3:1, a drainage terrace with a width of at least 6 feet is required along the contact. As an alternative, the natural or cut portion of the slope can be excavated and replaced as a stability fill to provide an all-fill slope condition.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-12 (continued) When constructing fill slopes, the grading contractor shall avoid spillage of loose material down the face of the slope during the dumping and rolling operations. Preferably, the incoming load shall be dumped behind the face of the slope and bladed into place. After a maximum of 4 feet of compacted fill has been placed, the contractor shall backroll the outer face of the slope by backing the tamping roller over the top of the slope and thoroughly covering all of the slope surface with overlapping passes of the roller. The foregoing shall be repeated after the placement of each 4-foot thickness of fill. As an alternative, the fill slope can be over built and the slope cut back to expose a compacted core. If the required compaction is not obtained on the fill slope, additional rolling will be required prior to placement of additional fill, or the slope shall be overbuilt and cut back to expose the compacted core.</p> <p>4.1-13 Slope Planting: In order to reduce the potential for erosion, all cut and fill slopes shall be seeded or planted with proper ground cover as soon as possible following grading operations in accordance with Section 7019 of the County of Los Angeles Building Code, 1999, or latest edition. The ground cover shall consist of drought-resistant, deep-rooting vegetation. A landscape architect shall be consulted for ground cover recommendations, plant selection, installation procedures, and plant care requirements.</p> <p>4.1-14 Subdrains: Canyon subdrains are required to intercept and remove groundwater within canyon fill areas. All subdrains shall extend up-canyon, with the drain inlet carried to within 15 feet of final pad grade. Specific subdrain locations and recommendations shall be provided as part of the future rough grading plan review.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-15 Bedrock shall be over-excavated to a minimum depth of 5 feet below lots and streets. Bedrock shall be overexcavated to a depth of at least 3 feet below proposed soil subgrade areas receiving pavement or hardscape improvements.</p> <p>4.1-16 Mint Canyon Formation bedrock materials exposed at pad grade may contain expansive claystone beds that could cause differential expansion. Therefore, within building areas at locations where expansive Mint Canyon Formation units are exposed at pad grade, it is required that the bedrock be removed and recompact to a depth of at least 8 feet below the proposed final pad elevations or 5 feet below the bottom of proposed footings, whichever is greater. The soils generated by these over-excavations shall be mixed with non-expansive soils to yield a relatively non-expansive mixture. Shall the resulting fill soil still be expansive, special construction techniques such as pad subgrade saturation or post-tensioned slabs may be required, at the discretion of the Project Geotechnical Consultant, to reduce the potential for expansive soil related distress.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-17 To reduce the potential for cracking and differential settlement, the portion of the lot in bedrock shall be over-excavated to a depth of at least 5 feet below the proposed finished pad elevation; or 3 feet below the bottom of proposed footings, whichever is greater. The over-excavation shall extend at least 5 feet laterally beyond the building limits. Where removal and recompaction for potentially expansive soils or bedrock is also required, it is recommended that the 8-foot removals be performed as described in the “Expansive Bedrock” section of the Project Geotechnical Report.</p> <p>Foundation and floor slabs for structures located within a transition zone shall also contain special reinforcement as designed by the Project Structural Engineer. Continuous footings located across the transition zone and 20 feet on either side of the contact shall incorporate a minimum of two No. 4 bars, one at the top and one at the bottom.</p> <p>Floor slabs located across the transition zone and 20 feet on either side of the contact shall have a minimum slab thickness of at least 4 inches and shall contain as a minimum No. 4 bars spaced a maximum of 18 inches on center. As an alternative, post-tensioned floor slabs may be used.</p> <p>4.1-18 General: Residential and commercial buildings up to three stories in height may be supported on continuous or individual spread footings established in properly compacted fill. The following recommendations shall be considered preliminary since fill will be used in some lots to raise the site grade and the final design values will depend upon the engineering characteristics of the fill soil. The preliminary design values are based upon the site investigation, experience with the soils in the area, and the site preparation and grading recommendations for this project.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-19 Bearing Capacity: It is assumed that the proposed buildings will be founded at approximately final planned grades, with column loads less than 100 kips, and have normal floor loads with no special requirements. Individual column pads or wall footings for buildings shall have a width of at least 12 inches and be placed at a depth of at least 18 inches below the lowest final adjacent grade.</p> <p>Structures may be placed on spread footings designed using a bearing value of 2,000 pounds per square foot (psf). The recommended bearing value is a net value, and the weight of concrete in the footings may be taken as 50 pounds per cubic foot (pcf). The weight of soil backfill may be neglected when determining the downward loads from the footings. A one-third increase in the bearing value may be used when considering wind or seismic loads.</p> <p>While the actual bearing value of the fill placed at the site will depend on the materials used and the compaction methods employed, the quoted bearing value will be applicable if acceptable soils are used and are compacted as recommended. The bearing value of the fill shall be confirmed during grading.</p> <p>4.1-20 Lateral Resistance: Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.4 applied to the dead loads may be used between the footings, floor slabs, and the supporting soils. The passive resistance of properly compacted fill soils may be assumed to be equal to the pressure developed by a fluid with a density of 250 pcf. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation																		
4.1 GEOTECHNICAL HAZARDS (continued)																				
	<p>4.1-21 Foundation Observations: To verify the presence of satisfactory soils at foundation design elevations, the excavations shall be observed by the Project Geotechnical Consultant. Excavations shall be deepened as necessary to extend into satisfactory soils. Where the foundation excavations are deeper than 4 feet, the sides of the excavations shall be sloped back at 0.75:1 or shored for safety. Inspection of foundation excavations may also be required by the appropriate reviewing governmental agencies. The contractor shall be familiar with the inspection requirements of the reviewing agencies.</p> <p>4.1-22 Under Section 1613, "Earthquake Loads" of the International Building Code (IBC), the following coefficients and factors apply to the seismic force design of structures on the project site.</p> <table border="0" data-bbox="997 730 1333 1104"> <tr> <td>Latitude</td> <td>34.41599</td> </tr> <tr> <td>Longitude</td> <td>-118.4342</td> </tr> <tr> <td>Site Class</td> <td>D</td> </tr> <tr> <td>Ss</td> <td>1.810</td> </tr> <tr> <td>S1</td> <td>0.673</td> </tr> <tr> <td>SMs</td> <td>1.810</td> </tr> <tr> <td>SM1</td> <td>1.009</td> </tr> <tr> <td>SDs</td> <td>1.207</td> </tr> <tr> <td>SD1</td> <td>0.673</td> </tr> </table> <p>The parameters were determined using the Ground Motion Parameter Calculator (Version 5.0.8) at the United States Geologic Survey (USGS) Earthquake Hazards website.</p>	Latitude	34.41599	Longitude	-118.4342	Site Class	D	Ss	1.810	S1	0.673	SMs	1.810	SM1	1.009	SDs	1.207	SD1	0.673	
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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-23 General: Backfill placed behind retaining walls shall be compacted to a minimum of 90 percent of the maximum dry density as determined by ASTM D 1557. When backfilling behind walls, it is required that the walls be braced and heavy compaction equipment not be used closer to the back of the wall than the height of the wall.</p> <p>4.1-24 Lateral Earth Pressures: For design of non-building retaining walls, where the surface of the backfill is level and the retained height of soils is less than 15 feet, it may be assumed that drained, non-expansive soils will exert a lateral pressure equal to that developed by a fluid with a density of 35 pcf. Where the surface of the backfill is inclined at 2:1, it may be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 47 pcf.</p> <p>In addition to the recommended earth pressures, the walls shall be designed to resist any applicable surcharges due to any nearby foundations, walls, storage or traffic loads. A drainage system, such as weepholes or a perforated pipe shall be provided behind the walls to prevent the development of hydrostatic pressure. Recommendations for wall drains are presented as follows.</p> <p>If a drainage system is not installed, the walls shall be designed to resist an additional hydrostatic pressure equal to that developed by a fluid with a density of 60 pcf against the full height of the wall. In addition to the recommended earth and hydrostatic pressures, the upper 10 feet of walls adjacent to vehicular traffic areas shall be designed to resist a uniform lateral pressure of 100 psf. This pressure is based on an assumed 300 psf surcharge behind the walls due to normal traffic. If the traffic is kept back at least 10 feet from the walls, the traffic surcharge is not required.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-25 Wall Drainage: A drainage system shall be provided behind all retaining walls or the walls shall be designed to resist hydrostatic pressures. Retaining wall backfill may be drained by a perforated pipe installed at the base and back side of the wall. The perforated pipe shall be at least 4 inches in diameter, placed with the perforations down, and be surrounded on all sides by at least 6 inches of gravel. The pipe shall be installed to drain at a gradient of between 0.5 to 1 percent and shall be connected to an outlet device. A filter fabric such as Mirafi 140 or equivalent shall be placed on top of gravel followed by a minimum 2-foot thick compacted soil layer. Alternatively, the filter fabric and gravel is not required when using a continuous slotted pipe and graded sand which conforms to Los Angeles County Flood Control District (LACFCD) "F1 " Designated Filter Material.</p> <p>The backside of the wall shall be waterproofed. A 6-inch vertical gravel chimney drain, Miradrain, or equivalent, shall be placed behind retaining walls and extend to within 18 inches below the top of the wall backfill to provide a drainage path to the perforated pipe. The top of the vertical drain shall be capped with 18 inches of on-site soils.</p> <p>The drainage system shall be observed by the Project Geotechnical Consultant prior to backfilling the retaining wall. Inspection of the drainage system by the City of Santa Clarita will also be required.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-26 General: The proposed development includes a proposed buried soil cement channel liner. Detailed construction plans for the soil cement channel liner are not yet available and will be geotechnically reviewed in a future report to ensure consistency with the findings in the Project Geotechnical Report. The following preliminary recommendations can be used in the planning of the proposed bank protection. The grading recommendations presented in the preceding sections are also applicable to the proposed channel lining. Overexcavation of the natural soils is not expected to be required for the lining, though existing fill soils shall be excavated and replaced with compacted fill. The backcut for the channel lining may be sloped back at 1.25:1. Concrete lined and soil-cement channel liners may be inclined at 1.5:1 or flatter. Grouted and ungrouted rip-rap liners may be inclined at 2:1 or flatter.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-27 Soil Cement: It is expected that portions of the on-site alluvial soils will be suitable for use in soil-cement. For estimating purposes, a cement content of 8 to 12 percent, by weight, may be used. To determine the actual required cement content, the granular soils that are to be used in a soil-cement channel lining shall be stockpiled. Representative samples of the stockpiled material shall be mixed with varying amounts of cement, compacted, and cured for different time intervals. Based on the results of unconfined compression tests on the samples of the soil-cement mixtures, the Project Geotechnical Consultant shall determine during grading activities the percentage of cement content to be used during construction. This testing shall take place when soil intended for soil cement manufacture has been stockpiled on site. The soil-cement shall be placed in layers not more than 8 inches in thickness and shall be compacted to at least 95 percent of the maximum dry density at a moisture content of no more than 2 percent over optimum for the soils. The placement of the soil-cement shall be performed under the observation of the Project Geotechnical Consultant, who shall perform sieve analyses, compaction, unconfined compression, and moisture-density tests.</p> <p>4.1-28 The Vista Canyon Road Bridge shall be constructed to extend the existing Lost Canyon Road across the Santa Clara River. Final construction plans shall be reviewed to ensure consistency with the Project Geotechnical Report. It is anticipated that the bridge will be founded on driven or cast-in-drilled-hole piles at bents and abutments.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 GEOTECHNICAL HAZARDS (continued)		
	<p>4.1-29 The grading operations shall be observed by the Project Geotechnical Consultant. The Project Geotechnical Consultant shall, at a minimum, have the following duties:</p> <ul style="list-style-type: none"> • Observe the excavation so that any necessary modifications based on variations in the soil/rock conditions encountered can be made; • Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade. The representative shall also observe proof-rolling and delineation of areas requiring overexcavation; • Evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing where necessary; • Observe the fill and backfill for uniformity during placement; • Test fill for field density and compaction to determine the percentage of compaction achieved during fill placement; • Geologic observation of all cut slopes, keyways, backcuts and geologic exposures during grading to ascertain that conditions conform to those anticipated in the report; and • Observe benching operations; observe canyon cleanouts for subdrains, and subdrain installation. 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>4.2 FLOOD</p> <p>Construction-related site clearing and grading operations within the project site would potentially discharge sediment into the Santa Clara River during storm events. Temporary erosion control measures in disturbed areas of the project site are recommended during the construction phase to reduce this potential impact to less than significant levels.</p> <p>Once built out, the proposed project would reduce post-development stormwater flows during a Capital Flood event, as compared to existing conditions. Additionally, the proposed storm drainage improvements would meet the flood control requirements of the Flood Control and Watershed Management Divisions of the Los Angeles County Department of Public Works (LACDPW) and the City of Santa Clarita. As such, potentially significant impacts related to flood events would be reduced to less than significant levels.</p>	<p>4.2-1 During all construction phases, temporary erosion control shall be implemented to retain soil and sediment on the project site, and the bank stabilization areas, as follows:</p> <ul style="list-style-type: none"> • Re-vegetate exposed areas as quickly as possible; • Minimize disturbed areas; • Divert runoff from downstream drainages with earth dikes, temporary drains, slope drains, etc.; • Reduce velocity through outlet protection, check dams, and slope roughening/terracing; • Implement dust control measures, such as sand fences, watering, etc.; • Stabilize all disturbed areas with blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, and/or other erosion resistant soil coverings or treatments; • Stabilize construction entrances/exits with aggregate underdrain with filter cloth or other comparable method; • Place sediment control BMPs at appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season (sediment control BMPs may include filtration devices and barriers, such as fiber rolls, silt fence, straw bale barriers, and gravel inlet filters, and/or with settling devices, such as sediment traps or basins); and/or • Eliminate or reduce non-stormwater discharges (e.g., pipe flushing, fire hydrant flushing, and over-watering during dust control, vehicle and equipment wash down) from the construction site through the use of appropriate sediment control BMPs. 	<p>Implementation of the mitigation measures to the satisfaction of the LACDPW and the City of Santa Clarita would reduce storm-related flooding, erosion, and sedimentation impacts to a level below significant. Therefore, no significant unavoidable impacts are anticipated.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.2 FLOOD (continued)		
	<p>4.2-2 All necessary permits, agreements, letters of exemption from the USACE and/or the CDFG for project-related development within their respective jurisdictions must be obtained prior to the issuance of a grading permit, which permits grading within their respective jurisdictions.</p> <p>4.2-3 By October 1st of each year, a separate erosion control plan for construction activities shall be submitted to the local municipality describing the erosion control measures that will be implemented during the rainy season (October 1 through April 15).</p> <p>4.2-4 A final developed condition hydrology analysis (LACDPW Drainage Concept Report [DCR] and Final Design Report [FDR]) shall be prepared in conjunction with final project design when precise engineering occurs. This final analysis will be completed to confirm that the final project design is consistent with the approved drainage concept and this analysis. Those final calculations shall establish design features for the project that satisfy the criterion that post-development peak stormwater runoff discharge rates, velocities, and duration in natural drainage systems mimic pre-development conditions. All elements of the storm drain system shall conform to the policies and standards of the LACDPW, Flood Control Division, as applicable.</p> <p>4.2-5 Final project hydrology and debris production calculations shall be prepared by a project engineer to verify the requirements for debris basins and/or desilting inlets consistent with the approved drainage concept and this analysis.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS		
<p>Impacts associated with the proposed project were analyzed under three different scenarios: Phase 1 (2012), Project Buildout (2015), and Long-Range Cumulative (2030). Impacts under each of these scenarios are summarized below.</p> <p>Phase 1</p> <p>Phase 1 of the project would cause significant impacts at five study intersections in 2012. Implementation of mitigation measures would reduce these impacts to less than significant levels at four of the five impacted intersections. Recommended improvements at one of the intersections (Sand Canyon Road/Lost Canyon Road) would not be completed until after Phase I, as a connection to Lost Canyon Road at La Veda Avenue is not proposed with Phase I and, therefore, the project would have a temporary significant and unavoidable impact. However, implementation of identified mitigation at this intersection as part of project buildout would reduce impacts to a less than significant level.</p> <p>Project Buildout</p> <p>Full buildout of the project in 2015 would cause significant impacts at eight study intersections (inclusive of the five intersections impacted by Phase I). Implementation of recommended feasible mitigation measures at these intersections would reduce impacts to less than significant levels.</p>	<p>4.3-1 Prior to the completion and occupancy of project Phase 1, the project applicant shall convert the westbound left-turn lane on Soledad Canyon Road onto the SR-14 southbound on-ramp from a permitted to protected signal phase, and retime this traffic signal and the adjacent Sand Canyon Road/Soledad Canyon Road signal to optimize traffic flow.</p> <p>4.3-2 Prior to the completion and occupancy of project Phase 1, the project applicant shall take those steps necessary that result in retiming the traffic signals at the Via Princessa/SR-14 SB ramps and Via Princessa/SR-14 NB ramps intersections to optimize traffic flow.</p> <p>4.3-3 Prior to the completion and occupancy of project Phase 1, the project applicant shall install a westbound right-turn overlap arrow at the Via Princessa/Lost Canyon Road intersection.</p> <p>4.3-4 Prior to project completion and full occupancy (beyond Phase 1), the project applicant shall construct the following improvements at the Sand Canyon Road/Soledad Canyon Road and SR-14 SB Ramps/Soledad Canyon Road intersections:</p> <ul style="list-style-type: none"> • Restripe Soledad Canyon Road to include a third through lane in each direction from just east of the SR-14 ramp intersection to west of the Sand Canyon Road intersection. • Install a right-turn overlap arrow on the northbound Sand Canyon Road approach to Soledad Canyon Road. • Retime and optimize operations of both traffic signals based on the revised lane geometrics and signal phasings. 	<p>Phase 1 of the project would further degrade LOS F operations at the Sand Canyon Road/Lost Canyon Road intersection (No. 5), resulting in a temporary, unavoidable significant impact. Buildout of the project and installation of Intersection Design Option No. 2, 3, or 4 would mitigate the project's impacts to a less than significant level. Selection of Intersection Design Option No. 1 would result in the project having a permanent, significant, unavoidable impact at this intersection.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<p>One of the intersections significantly impacted under the Project Buildout scenario would be the Sand Canyon Road/Lost Canyon Road intersection. The proposed mitigation is to implement one of the three mitigation design options for the intersection. Another design option would leave the intersection in its present condition – a four way stop, which would not mitigate project or cumulative impacts. The four options are:</p> <ul style="list-style-type: none"> Option 1 (Four-Way Stop) – this design option is presently in place at the intersection. Under this design option, the operation of this intersection in the future would worsen to a Level of Service (LOS) F with or without the Vista Canyon project. If this option is selected, the project would result in a significant unavoidable impact at the intersection. Option 2 (Signalized Intersection “Look Ahead Signal”) – this design option would result in a signalized intersection, with a “look ahead” signal at the southwest corner to address northbound “line of sight” requirements. Minimal widening of the intersection would occur with this design option, with right-of-way necessary at the northwest and southeast corners. Option 2 would result in the improved operation of the intersection in the future (LOS D) even with future growth (including Vista Canyon), as compared to the existing four-way stop design. 	<p>4.3-5 Prior to the completion and full occupancy of the project (beyond Phase 1), the project applicant shall install the selected Intersection Design Option (No. 2, 3 or 4) at the Sand Canyon Road/Lost Canyon Road intersection. If Intersection Design Option No. 1 is selected, the project would have a significant, unavoidable impact.</p> <p>The four design options are:</p> <ul style="list-style-type: none"> Option 1 (Four-Way Stop) – this design option (see Exhibit 4.3-16 and 4.3-16a) is presently in place at the intersection. The intersection is presently congested in the morning and afternoon when Pinecrest School and Sulphur Springs Elementary School are in session due to student drop-off and pick-up. Under this design option, the operation of this intersection in the future would worsen to a Level of Service (LOS) F with or without the Vista Canyon project. If this option is selected, the project would result in a significant unavoidable impact at the intersection. Option 2 (Signalized Intersection “Look Ahead Signal”) – this design option (see Exhibit 4.3-17) would result in a signalized intersection, with a “look ahead” signal at the southwest corner to address northbound “line of sight” requirements. Minimal widening of the intersection would occur with this design option, with right-of-way necessary at the northwest and southeast corners. Encroachment within the protected zone of the heritage oak tree located along the eastern edge of Sand Canyon Road would remain similar to the existing condition. A fence, located within the right-of-way, would have to be removed to adhere to “line of sight” requirements. Option 2 would result in the improved operation of the intersection in the future (LOS D) even with future growth (including Vista Canyon), as compared to the existing four-way stop design. 	<p>Under long-term 2030 cumulative conditions, the project would cause significant impacts to segments of Soledad Canyon Road located within the City. As these roadway segments are already constructed to their maximum width of six lanes, no feasible mitigation measures are available to mitigate these impacts. Therefore, the project’s contribution to impacts along these segments of Soledad Canyon Road in 2030 would be significant and unavoidable.</p> <p>With respect to SR-14, there presently are no improvements for the SR-14 planned and programmed by Caltrans that would mitigate the identified impacts, nor is there an established funding program in place to collect developer fees to implement any such improvements.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<ul style="list-style-type: none"> Option 3 (Roundabout) – this design option would include the installation of a “roundabout” or traffic circle at the intersection. This option would involve the relocation of the intersection to the north and west to adhere to northbound “line of sight” requirements. From a traffic operational standpoint, this design option would be the best of the four, improving the future LOS F under the existing design to an LOS C in the AM peak hour and LOS B in the PM peak hour even with future growth (including the Vista Canyon project). Option 4 (Signalized Intersection - Standard Configuration) – this design option improves the intersection of Lost Canyon Road/Sand Canyon Road with a fully signalized intersection complying with all of the City’s standard intersection design criteria. Similar to the “Look Ahead Signal” design option, this option would result in the improved operation of the intersection (LOS D), as compared to the existing design, even with future growth (including the Vista Canyon project). 	<p>4.3-5 (continued)</p> <ul style="list-style-type: none"> Option 3 (Roundabout) – this design option (see Exhibit 4.3-18 and 4.3-18a) would include the installation of a “roundabout” or traffic circle at the intersection. This option would involve the relocation of the intersection to the north and west to adhere to northbound “line of sight” requirements. Right-of-way acquisition would be necessary on all four corners; most of it would come from the northwest corner (which is presently vacant). Encroachment within the protected zone of the heritage oak tree located along the eastern edge of Sand Canyon Road would still occur, consistent with the existing condition. From a traffic operational standpoint, this design option would be the best of the four, improving the future LOS F under the existing design to an LOS C in the AM peak hour and LOS B in the PM. peak hour even with future growth (including the Vista Canyon project). Option 4 (Signalized Intersection - Standard Configuration) – this design option (see Exhibit 4.3-19) improves the intersection of Lost Canyon Road/Sand Canyon Road with a right-turn lane extension. This option would require the acquisition of right-of-way on the northwest and southeast corner. A “line of sight” easement would be needed from three properties located east of Sand Canyon Road and south of the intersection. All vegetation and fencing within this easement would need to be removed, including the heritage oak tree located along the eastern edge of Sand Canyon Road. Similar to the “Look Ahead Signal” design option, this option would result in the improved operation of the intersection (LOS D), as compared to the existing design, even with future growth (including the Vista Canyon project). 	<p>Notwithstanding, the project applicant and Caltrans have negotiated a Traffic Mitigation Agreement that requires the applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based upon the project’s fair share. The Traffic Mitigation Agreement would be signed by both parties upon project approval. However, because there are no planned and programmed improvements and no established funding program, the project’s payment of an in-lieu fee would not fully mitigate the identified significant impacts. Therefore, mitigation is considered infeasible and the identified impacts would remain significant and unavoidable.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<p>Buildout of the proposed project also would provide improvements to the segment of Lost Canyon Road between the project site and Sand Canyon Road. The proposed improvements to this segment of Lost Canyon Road include:</p> <ul style="list-style-type: none"> • Pavement widening and striping to accommodate one travel lane in each direction with a median turn lane, a trail along the north side of the roadway, a roundabout at the intersection of La Veda Avenue and Lost Canyon Road, and parallel parking on the south side of Lost Canyon Road (these improvements would be completed within the existing right-of-way); • Restricting the outbound-only driveways at each school to right-turns to minimize conflicting turning movements (provided that a roundabout is installed at the Sand Canyon Road/Lost Canyon Road intersection); and • Construction of a narrow raised median at the easterly Pincrest School driveway, including a sign prohibiting u-turns. 	<p>4.3-6 Prior to project completion and full occupancy (beyond Phase 1), the project applicant shall construct the following improvements at the Soledad Canyon Road/Lost Canyon Road intersection:</p> <ul style="list-style-type: none"> • Install a traffic signal with signal equipment placed in locations that accommodates the planned restriping of the road to six lanes. • Construct an exclusive right-turn lane on the eastbound Soledad Canyon Road approach consistent with the condition of approval previously placed on the undeveloped parcel adjacent to this intersection. • Construct two left-turn lanes and one right-turn lane (with a right-turn overlap phase) on the Vista Canyon Road approach. Each lane should provide 125 feet of storage. • Lengthen the westbound left-turn lane on Soledad Canyon Road from 140 feet to 200 feet to accommodate the projected 95th percentile vehicle queue of 140 feet and to provide opportunities for deceleration. 	<p>Relatedly, by virtue of including a Metrolink Station, Bus Transfer Station and providing professional office space in the Santa Clarita Valley, the project would provide alternative travel modes and employment opportunities for Santa Clarita Valley residents. Nevertheless, impacts to SR-14 are considered significant and unavoidable.</p> <p>All other significant impacts would be mitigated to a level below significant.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<p>With respect to SR-14, project buildout also would increase traffic on SR-14 resulting in significant impacts to the segment from Sand Canyon Road to Soledad Canyon Road. It should be noted that this segment would operate at unacceptable levels of service even without the project as most of the additional vehicle trips would be generated by future growth occurring north and east of the Valley, primarily within the Antelope Valley.</p> <p>There presently are no improvements for the SR-14 planned and programmed by Caltrans that would mitigate the identified impacts, nor is there an established funding program in place to collect developer fees to implement any such improvements. Notwithstanding, the project applicant and Caltrans have negotiated a Traffic Mitigation Agreement that requires the applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based upon the project's fair share. The Traffic Mitigation Agreement would be signed by both parties upon project approval. However, because there are presently no planned and programmed improvements for SR-14, nor is there an established funding program, the project's payment of an in-lieu fee would not fully mitigate the identified significant impacts. Therefore, mitigation is considered infeasible and the identified impacts would remain significant and unavoidable.</p>	<p>4.3-7 Prior to project completion and full occupancy (beyond Phase 1), the project applicant shall construct the following improvement at the Via Princessa/Lost Canyon Road intersection:</p> <ul style="list-style-type: none"> • Restripe the southbound approach to include a second left-turn lane. <p>4.3-8 Prior to project completion and full occupancy (beyond Phase 1), the project applicant shall construct the following improvement at the Soledad Canyon Road/Sierra Highway intersection:</p> <ul style="list-style-type: none"> • Install a right-turn overlap arrow on the southbound Sierra Highway approach to Soledad Canyon Road. <p>4.3-9 The applicant shall execute and adhere to the terms of the mitigation agreement with Caltrans to minimize the project's impacts to SR 14.</p> <p>4.3-10 The applicant shall comply with the requirements of the Vista Canyon Parking Demand Analysis.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<p>Long-Range Cumulative</p> <p>Under cumulative conditions, the project would cause significant impacts along Soledad Canyon Road between Sierra Highway and Golden Valley Road. No feasible improvements are available as this arterial is already constructed to its ultimate width; the City General Plan Circulation Element recognizes that in some cases street improvements to accommodate additional traffic are not capable of being implemented due to right-of-way limitations and existing development. Therefore, these impacts would be significant and unavoidable. However, it is worth noting that the project is a transit-oriented development and, as such, would generate fewer vehicle trips and miles of travel than traditional developments. The project will also be paying Eastside Bridge and Major Thoroughfare District fees or constructing eligible improvements that serve to mitigate impacts within the District boundaries.</p>		

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.3 TRAFFIC AND ACCESS (continued)		
<p>Project buildout also would increase traffic on SR-14 resulting in significant cumulative impacts during the PM peak hour (northbound direction) for the segment from Sand Canyon Road to Soledad Canyon Road. It should be noted that a majority of the future traffic growth on SR-14 comes from areas east and north of the Santa Clarita Valley. As is the case with respect to SR-14 impacts under the Project Buildout 2015 scenario, there presently are no improvements for the SR-14 planned and programmed by Caltrans that would mitigate the identified impacts, nor is there an established funding program in place to collect developer fees to implement any such improvements. Notwithstanding, the project applicant and Caltrans have negotiated a Traffic Mitigation Agreement that requires the applicant to pay an in-lieu fee to Caltrans for future improvements to SR-14 based upon the project's fair share. The Traffic Mitigation Agreement would be signed by both parties upon project approval. However, because there are presently no planned and programmed improvements for SR-14, nor is there an established funding program, the project's payment of an in-lieu fee would not fully mitigate the identified significant impacts. Therefore, mitigation is considered infeasible and the identified impacts would remain significant and unavoidable.</p>		

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.4 AIR QUALITY		
<p>Construction-related emissions would exceed the South Coast Air Quality Management District’s (SCAQMD) significance thresholds for VOCs and NOx, and would exceed localized significance thresholds for NO2, PM2.5 and PM10. Operational emissions would exceed SCAQMD significance thresholds for VOC, NOx, CO, and PM10. The project also would result in regional emission levels that are cumulatively considerable for VOCs, NOx, CO, PM2.5, and PM10. Mitigation measures are provided to reduce the level of emissions and associated potential impacts. Nonetheless, impacts would be significant and unavoidable.</p>	<p>4.4-1 The project applicant shall prepare a Construction Traffic Emission Management Plan to minimize emissions from vehicles including, but not limited to, scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting truck idling in excess of 5 minutes.</p> <p>4.4-2 The project contractor shall use electric or alternative fueled mobile equipment for on-site uses instead of diesel equipment if suitable equipment is commercially available and the necessary power and refueling infrastructure can reasonably be installed on site.</p> <p>4.4-3 The project contractor shall maintain construction equipment by conducting regular tune-ups according to the manufacturers’ recommendations.</p> <p>4.4-4 The project contractor shall use electric welders to avoid emissions from gas or diesel welders if suitable equipment is commercially available and the necessary power infrastructure can reasonably be installed on site.</p> <p>4.4-5 The project contractor shall use on-site electricity or alternative fuels rather than diesel-powered or gasoline-powered generators if suitable equipment is commercially available and the necessary power and refueling infrastructure can reasonably be installed on site.</p>	<p>No feasible mitigation exists that would reduce VOCs and NOx emissions to below the SCAQMD’s recommended thresholds of significance. The project’s construction-related emissions of VOCs, NOx, PM10, and PM2.5 and operation-related emissions of VOCs, NOx, CO, and PM10 are considered significant and unavoidable.</p> <p>As the South Coast Air Basin is already designated as nonattainment for ozone (VOCs and NOx are ozone precursors), and PM10, project emissions that exceed the SCAQMD thresholds during construction and operation are cumulatively considerable, and thus, are considered significant and unavoidable cumulative air quality impacts.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.4 AIR QUALITY (continued)		
	<p>4.4-6 The project applicant shall require on-site off-road construction equipment to meet U.S. EPA Tier 2 emissions standards at a minimum. This requirement will apply to any piece of equipment that is expected to operate on-site more than 15 days.</p> <p>4.4-7 For equipment not covered by mitigation measure 4.4-6 above, the project applicant shall evaluate the potential for reducing exhaust emissions from on-road and off-road construction equipment, and implement such measures. Control technologies to be considered may include particulate traps and filters, selective catalytic reduction, oxidation catalysts, air enhancement technologies, and the use of alternatively (non-diesel) fueled engines. Considerations will include commercial availability of appropriate CARB verified technologies.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.5 NOISE		
<p>Construction of the proposed project would require site preparation, grading, and the construction of roadways, infrastructure, and buildings. Each of these construction activities typically involves the use of heavy-duty equipment, all of which could expose off-site residents and other noise sensitive receptors to temporary but significant noise impacts.</p> <p>Construction activities also would result in vibration impacts. Since ground-borne vibration could be generated during construction in excess of the Federal Transit Administration vibration standards, impacts to sensitive uses (residential) within the project site would remain significant and unavoidable.</p> <p>Traffic associated with the proposed project would contribute to cumulative noise increases in the region. The cumulative traffic increase on State Route 14 (SR-14) would result in a cumulatively considerable increase in noise and would have a significant impact on off-site noise-sensitive receptors located adjacent to or near to portions of SR-14.</p>	<p>4.5-1 Pursuant to Section 11.44.080 of the City’s Noise Ordinance, construction work shall occur within 300 feet of occupied residences only between the hours of 7:00 AM and 7:00 PM Monday through Friday, and between 8:00 AM and 6:00 PM on Saturday. No construction work shall occur on Sundays, New Year’s Day, Independence Day, Thanksgiving Day, Christmas Day, Memorial Day, and Labor Day.</p> <p>4.5-2 The project applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by the construction contractor to reduce construction noise and vibration levels:</p> <ul style="list-style-type: none"> • Two weeks prior to the commencement of construction, notification must be provided to surrounding land uses of the project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. • Ensure that construction equipment is properly muffled according to industry standards and in good working condition. • Place noise- and vibration- generating construction equipment and locate construction staging areas away from sensitive uses, where feasible (particularly away from the residential uses located north and east of the project site). 	<p>Mitigation measures recommended to reduce construction-related noise and vibration impacts would reduce the severity of the impact; however, the potential for construction-related noise and vibration levels to exceed the significance thresholds would remain. Therefore, impacts are considered significant and unavoidable.</p> <p>No feasible mitigation measures exist to mitigate the significant operational-related noise impacts along SR-14.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.5 NOISE	4.5-2 (continued) <ul style="list-style-type: none"> • Use electric air compressors and similar power tools rather than diesel equipment, where feasible. • Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes. • Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City of Santa Clarita prior to issuance of the grading permit. 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES		
<p>Significant impacts would occur with respect to herbaceous wetlands, river wash, alluvial scrub (terrace), arrow weed scrub, big sagebrush scrub, mulefat scrub, southern willow scrub, southern cottonwood-willow riparian forest, southern coast live oak riparian forest, coastal scrub and alliances/associations, coast live oak woodland, wildlife habitat, special-status birds and other non-avian special-status wildlife species, special-status plant species, and protected oaks. Significant indirect impacts would occur as a result of increased light and glare, increased non-native plant species, and increased human and domestic animal presence. Cumulative impacts include reducing total habitat area, limiting species diversity, restricting movement corridors, and overall loss of sensitive vegetation communities, wildlife habitat, and open area in the Santa Clarita Valley region.</p>	<p>4.6-1 The applicant shall mitigate for alkali rye at a ratio of 0.5:1 through on-site habitat restoration. Prior to the issuance of a grading permit for the project, the applicant shall provide to the City Community Development Department for review and approval a detailed mitigation and monitoring plan for the restoration of alkali rye. The mitigation plan shall encompass comparable general habitat attributes and acreage of useable wildlife habitat on the subject property (approximately 0.35 acres), and include documentation to monitor the success of the restoration through performance standards over a five-year period. The proposed mitigation site would be in natural areas within or adjacent to the Oak Park or other suitable open space areas within the project site.</p> <p>The applicant shall implement the Lily Plan, 2009, that includes salvaging and re-establishment of slender mariposa population on the mitigation site designated in the plan.</p> <p>If discovered during pre-construction surveys, the applicant shall prepare and implement a Plummer’s mariposa lily mitigation plan that would include salvaging and re-establishment of Plummer’s mariposa population on an on-site mitigation site designated in the plan.</p> <p>4.6-2 The applicant shall mitigate for the loss of riparian scrub and big sagebrush scrub through implementation of the Wetlands Plan, 2009 to the satisfaction of the City’s Community Development Department.</p>	<p>With implementation of the proposed mitigation measures, the proposed project’s direct, indirect, and cumulative impacts would be reduced to a level below significant; as such, no significant unavoidable impacts would result from project implementation.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-3 All stream flows traversing a construction site or temporary access road shall be diverted around the site and under access roads (using a temporary culverts or crossings that allow fish passage). A temporary diversion channel shall be constructed using the least damaging method possible, such as blading a narrow pilot channel through an open sandy river bottom. The removal of wetland and riparian vegetation to construct the channel shall be avoided to the greatest extent possible. The temporary channel shall be connected to a natural channel downstream of the construction site prior to diverting the stream. The integrity of the channel and diversion shall be maintained throughout the construction period. The original stream channel alignment shall be restored after construction, provided suitable conditions are present at the work site after construction. Any temporary stream diversion plan shall be consistent with the USACE and CDFG permits required for project implementation.</p> <p>4.6-4 A qualified biologist shall be present when any stream diversion takes place, and shall patrol the areas both within, upstream, and downstream of the stream diversion work area. Under no circumstances shall the unarmored threespine stickleback be collected or relocated, unless USFWS personnel or their agents implement this measure or authorized by USACE in a subsequent Clean Water Act section 404 permit or streambed alteration agreement issued by CDFG.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-5 Prior to issuance of a grading permit, the applicant shall employ a qualified biologist to implement the Spadefoot Plan, 2009, with review and oversight provided by the City Planning Department.</p> <p>4.6-6 Thirty days prior to grading activities, a qualified biologist shall conduct a survey within appropriate habitat areas to capture and relocate individual silvery legless lizard, coastal western whiptail, rosy boa, San Diego banded gecko, San Bernardino ringneck snake, coast horned lizard, coast patch-nosed snake, and San Diego black-tailed jackrabbit in order to avoid or minimize take of these sensitive species. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. Results of the surveys and relocation efforts shall be provided to the City with a copy to CDFG. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.</p> <p>4.6-7 Beginning 30 or more days prior to the removal of any suitable riparian habitat that will occur during the riparian bird breeding and nesting season of March 15th through September 1st, the applicant shall arrange for weekly bird surveys to detect the above riparian bird species in the habitats to be removed, and any other such habitat within 300 feet of the construction work areas. The surveys shall be conducted by a qualified biologist using CDFG or USFWS survey protocols. The surveys shall continue on a weekly basis, with the last survey being conducted no more than 7 days prior to the initiation of construction work.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-7 (continued)</p> <p>If an active nest is found, clearing and construction within 300 feet of the nest shall be postponed until the nest is vacated and juveniles have fledged, and when there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the ecological sensitivity of the area.</p> <p>Results of the surveys, including surveys to locate nests, shall be provided to the USACE and CDFG. The results shall include a description of any nests located and measures to be implemented to avoid nest sites.</p> <p>4.6-8 Signage shall be installed along the River Corridor indicating that no pets of any kind are allowed within the preserved River Corridor.</p> <p>4.6-9 Fencing of sufficient height and design (i.e., ranch-rail) shall be constructed between the edge of developed areas and the River Corridor to deter humans and pets from entering habitat areas within the River Corridor.</p> <p>Locally indigenous native shrubs shall be planted along the fence to further deter access. Final fence design shall be approved by the City Planning Department. Fencing shall not be placed within the USACE or CDFG jurisdictional areas of the site.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-7 (continued) The potentially palette of local indigenous native plant species to be used along the fence include the following, observed on site during the course of biological surveys: California juniper, blue elderberry, four-wing saltbush, quailbush, skunk bush, California sagebrush, Great Basin sagebrush, coyote bush, mulefat, white-stem rabbitbrush, thick-leaf yerba santa, bladderpod, cane cholla, coastal prickly pear, coast live oak, golden currant, chaparral currant, black sage, western sycamore, California buckwheat, thick-leaf ceanothus, wedgeleaf ceanothus, chamise, Fremont’s cottonwood, Gooding’s willow, arroyo willow, and Whipple’s yucca.</p> <p>4.6-10 Human access into the River Corridor shall only occur in designated locations (i.e., existing and future trails). All motorized vehicles and off-trail bike riding shall be prohibited from entering the preserved River Corridor with the exception of authorized emergency or maintenance vehicles, and signs shall be posted along the River Corridor prohibiting such uses.</p> <p>4.6-11 Prohibitions against human, domestic animal, and motorized vehicle/bike entry into the River Corridor shall be established by ordinance or recorded CC&Rs.</p> <p>4.6-12 Interpretative signs shall be constructed and placed in appropriate areas, as determined by a qualified biologist, that explain the sensitivity of natural habitats and the need to minimize impacts on these natural areas. The signs will state that the River Corridor is a protected natural area and that all pedestrians must remain on designated trails, all pets are to be restrained on a leash, and that it is illegal to harm, remove, or collect native plants and animals. The project applicant shall be responsible for installation of interpretive signs and fencing along the River Corridor.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-13 A qualified restoration specialist shall ensure that the proposed landscape plants will not naturalize and cause maintenance or vegetation community degradation in open-space areas of the project site. Container plants to be installed within public areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants shall not be on the Cal-IPC California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php). Except as required for fuel modification, irrigation of perimeter landscaping adjacent to the River Corridor with native plant communities shall be limited to temporary irrigation (i.e., until plants become established).</p> <p>4.6-14 The applicant shall be responsible for weeding all restoration/enhancement sites to prevent an infestation of perennial non-native invasive weeds. All perennial, non-native invasive weed species (e.g., arundo, pampas grass, fennel, perennial pepperweed, castor bean, tamarisk, etc.) shall be controlled for a period of 5 years after the initial vegetation community restoration, or until the 5-year success criteria described in the Wetlands Plan, 2009, are met. The cover of annual, non-native plant species at the mitigation sites shall not exceed the requirements of the Wetlands Plan, 2009, at any time during the period of documenting successful restoration.</p> <p>4.6-15 Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed in common areas and parks throughout the project site.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-16 All bridge, street, residential, and parking lot lighting shall be downcast luminaries or directional lighting with light patterns directed away from the River Corridor. CC&Rs shall require that exterior lighting within the residential areas adjacent to the River Corridor be limited to low luminosity.</p> <p>4.6-17 The following guidelines shall be followed to minimize impacts on remaining biological resources on site as a result of construction and grading activities and to ensure that potential impacts on these resources will remain less than significant:</p> <p>A qualified biologist shall be retained as a construction monitor to ensure that incidental construction impacts on biological resources are avoided, or minimized, and to conduct pre-grading field surveys for special-status plant and wildlife species that may be destroyed as a result of construction or site preparation activities. Responsibilities of the construction monitor include the following:</p> <ul style="list-style-type: none"> • The construction monitor shall attend pre-grade meetings to ensure that timing/location of construction activities do not conflict with mitigation requirements (e.g., seasonal surveys for plants and wildlife). • Mark/flag the construction area in the field with the contractor in accordance with the final approved grading plan. Haul roads and access roads shall only be sited within the grading areas analyzed in the project EIR. • Supervise cordoning of preserved natural areas that lie outside grading areas identified in the project EIR (e.g., with temporary fence posts and colored rope). 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-17 (continued)</p> <ul style="list-style-type: none"> • Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity. Any construction activity areas immediately adjacent to riparian areas or other special-status resources may be flagged or temporarily fenced by the monitor, at his/her discretion. • Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. The monitor should also discuss procedures for minimizing harm or harassment of wildlife encountered during construction. • Periodically visit the site during construction to coordinate and monitor compliance with the above provisions. <p>4.6-18 Construction personnel shall be prohibited from entry into areas outside the designated construction area, except for necessary construction related activities, such as surveying. All such construction activities shall be coordinated with the construction monitor.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-19 Construction activities shall be limited to the following areas of temporary disturbance:</p> <ul style="list-style-type: none"> • an 85-foot-wide zone that extends into the river from the base of the rip-rap or gunite bank protection where it intercepts the river bottom; • 100 feet on either side of the outer edge of the Vista Canyon Road bridge and the haul route (located within bridge zone); • 50-foot-wide corridor for all utility lines; and • 20-foot-wide temporary access ramps and roads to reach construction sites. <p>The locations of these temporary construction sites and the routes of all access roads within CDFG or USACE jurisdiction shall be shown on maps submitted to the CDFG and USACE. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed, and the post-construction activities to facilitate natural revegetation of the temporarily disturbed areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion shall occur outside the work area and access roads.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-20 Equipment shall not be operated in areas of ponded or flowing water within CDFG or USACE jurisdiction unless there are no practicable alternative methods to accomplish the construction work, and only after prior approval by the CDFG and the USACE. Approval shall be acquired by submitting a request to CDFG and USACE no later than 30 days prior to construction. The request must contain a biological evaluation demonstrating that no sensitive fish, amphibians, or reptiles are currently present, or likely to be present during construction, at the construction site or along access roads.</p> <p>4.6-21 Temporary sediment retention ponds shall be constructed downstream of construction sites that are located in River Corridor under the following circumstances:</p> <ul style="list-style-type: none"> • the construction site contains flowing or ponded water that drains off site into the undisturbed streamflow or ponds; or • streamflow is diverted around the construction site, but the work is occurring in the period November 1st through April 15th when storm flows could inundate the construction site. <p>The sediment ponds shall be constructed of riverbed material and shall prevent sediment-laden water from reaching undisturbed ponds or streamflows. To the extent possible, ponds shall be located in barren or sandy river bottom areas devoid of existing riparian scrub, riparian woodland, or aquatic habitat. The ponds shall be maintained and repaired after flooding events, and shall be restored to pre-construction grades and substrate conditions within 30 days after construction has ended at that particular site. The location and design of sediment retention ponds shall be included in the Storm Water Pollution Prevention Plan (SWPPP) prepared by the applicant for all construction activities that require a NPDES General Construction Activity Storm Water Permit.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-22 Installation of bridges, culverts, or other structures shall not impair movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade.</p> <p>4.6-23 Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.</p> <p>4.6-24 Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the CWA section 404 permit or CDFG 1603 agreement.</p> <p>4.6-25 Silt settling basins, installed during the construction process, shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.</p> <p>4.6-26 If a stream channel has been altered during the construction or maintenance operations, its low flow channel shall be returned as nearly as possible to pre-project topographic conditions without creating a possible future bank erosion problem, or a flat wide channel or sluice like area.</p> <p>4.6-27 Temporary structures and associated materials not designed to withstand strong seasonal flows shall be removed to areas above the high water mark before such flows occur.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-28 Staging and storage areas for construction equipment and materials shall be located outside of the CDFG or USACE jurisdiction.</p> <p>4.6-29 Any equipment or vehicles driven or operated within or adjacent to the River Corridor shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.</p> <p>4.6-30 Stationary equipment such as motors, pumps, generators, and welders which may be located within the River Corridor construction zone shall be positioned over drip pans. No fuel storage tanks shall be allowed in the River Corridor.</p> <p>4.6-31 The applicant shall use best efforts to ensure that no debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, watercourses included in the permit. When construction operations are completed, any excess materials or debris shall be removed from the work area.</p> <p>4.6-32 No equipment maintenance shall be done within or near the River Corridor where petroleum products or other pollutants from the equipment may enter this area.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-33 As the project reach of the Santa Clara River typically has no surface flows, any water diversions shall utilize:</p> <ul style="list-style-type: none"> • Pilot channels constructed to divert flows around work areas shall be sized to maintain existing water velocities, with wide, shallow channels being utilized. The channel should be kept as small as possible, extending no more than 25 feet upstream and downstream of the work area. Construction of pilot channels should start downstream. Once water is diverted into the new channel, the original channel should be visually inspected and any stranded animals shall be removed and returned to the water downstream of the diversion. Once the diversion is no longer needed, the area shall be restored as closely as possible to its original configuration. • The use of a pump to divert flows around a work site is also acceptable. The pump must have at least a 0.25-inch screen. Water should be discharged downstream, within 25 feet of the work area. Any dams installed across flowing water for the diversion shall be removed upon completion of construction and the area shall be restored as closely as possible to its original configuration. 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-33 (continued)</p> <ul style="list-style-type: none"> • The Operator shall alert the USACE and the Department of work to be performed at least two weeks in advance of the work. If the work may adversely impact Endangered species, the USACE, the Department and the City shall meet in the field to resolve the issue. The City may contact the USACE and the Department to identify areas of potential Endangered species habitat. If the USACE and the Department believe the work may adversely impact Endangered species or its habitat resources or the City wishes to consult with the USACE and the Department, a field meeting will be scheduled. At the field meeting, the USACE and the Department will provide information regarding Endangered or Threatened species that could be impacted by the project. If take of an Endangered species will occur, the appropriate Endangered species permits will be required. To the extent that a USFWS Section 7 and a CDFG Section 2081 Memorandum of Agreement have been completed for the species present, the mitigation measures shall be implemented and construction may proceed as outlined in these documents. • Standard dust control measures shall be implemented to reduce impacts on nearby plants and wildlife. This includes replacing ground cover in disturbed areas as quickly as possible; watering active sites at least twice daily; suspending all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and restricting traffic speeds on all unpaved roads to 15 mph or less in areas within 200 feet of vegetation. • Upon completion of construction, the contractor shall be held responsible to restore any haul roads and access roads that are outside of approved grading limits. This restoration shall be done in consultation with the construction monitor. 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-34 If the Oak Tree Permit is approved by the City Council, the applicant shall have permission to remove the following oak trees on the project site (Heritage Trees are in bold): No. 4, No. 25, No. 26, No. 27, No. 28, No. 29, No. 30, No.31, No. 32 and No. 54.</p> <p>If approved by the City Council, the applicant shall have permission to encroach into the protected zone of the following oak trees (Heritage Trees are shown in bold): No. 1, No. 3, No. 33, No. 34, No. 38, No. 47, No. 50, No. 52, No. 53 and No. 71. If approved by the City Council, the applicant shall have permission to trim livewood in excess of 2 inches in diameter of the following trees: No. 1, No. 3, No. 33, No. 34, No. 38, No. 52 and No. 53.</p> <p>If approved by the City Council, the applicant shall have permission to remove the following off-site oak trees (Heritage Trees shown in bold):</p> <p>Tree No. 25B (Lost Canyon Road/Sand Canyon Road Option 4 Only)</p> <p>If approved by the City Council, the applicant shall have permission to encroach within the protected zone of the following off-site oak trees (Heritage Trees shown in bold):</p> <p>Tree No. 25B (Lost Canyon Road/Sand Canyon Road Options 1-3 - encroachment and trimming)</p> <p>Tree No. 45 (Lost Canyon Road/Sand Canyon Road Options 1-4 – encroachment and trimming)</p> <p>4.6-35 The applicant and all their contractors shall be in compliance with the City of Santa Clarita Oak Tree Ordinance and Preservation and Protection Guidelines at all times throughout the project. Failure to comply with these requirements shall be considered non-compliant and may result in the issuance of a Stop All Work notice, construction delays and additional fees.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-36 The applicant and all their contractors shall adhere to all recommendations issued by the applicant’s Arborist of Record (AOR) both during on-site monitoring as well as those listed within the project’s oak tree reports and addendums. Failure to comply with these recommendations shall be considered non compliant and may result in the issuance of a Stop All Work notice, construction delays and additional fees.</p> <p>4.6-37 Mitigation for the oak tree impacts referenced above shall include dedication to the City of Santa Clarita of the 2-acre oak tree preserve located adjacent to the Oak Park. Dedication of this 2-acre property to the City shall occur in conjunction with dedication of the Oak Park. A deed restriction shall be recorded over this 2-acre preserve restricting its use to open space only and prohibiting any future development or grading. Signage shall be posted along the trail adjacent to the preserve indicating that this area is an oak tree preserve/mitigation area.</p> <p>Additionally, the applicant shall be required to plant mitigation oak trees on this 2-acre parcel as well as a portion of the Town Green parcel to the satisfaction of the Director of Community Development. The oak preserve and Town Green shall be the primary oak mitigation areas for the project. Secondary oak tree mitigation or planting areas shall include trail corridors throughout the project site. Group plantings of native oaks are encouraged in areas that will accommodate the trees for future growth. Examples are passive parks, break areas, open landscape areas, new trails and the entrance to commercial and residential portions of the project.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-37 (continued) The planting of on-site mitigation oak trees referenced above shall be equal to or exceed the International Society of Arboriculture (ISA) dollar value of all oak trees proposed for removal, presently estimated at \$404,990 (includes the 10 oak trees on-site and the one potential oak tree off-site). Prior to the issuance of grading permits and the start of any construction, the applicant shall be required to bond for the International Society of Arboriculture (ISA) dollar value of all oak trees proposed for removal.</p> <p>4.6-38 Prior to the issuance of grading permits and the start of any construction, the applicant shall have all required protective fencing installed around the oak trees. Oak trees that are proposed for encroachment shall have the protective fence placed at the furthest point away from the trunk that will allow for the necessary construction. All remaining oak trees shall have the fence installed at the protected zone located 5feet out from edge of dripline.</p> <p>4.6-39 Protective fencing shall consist of 5-foot standard chain link material supported by steel post driven directly into the ground and evenly spaced at 8 feet on center. 36-inch silt fencing shall be installed at the base of all protective fencing and be maintained in good repair throughout all phases of construction.</p> <p>4.6-40 A maximum of one non-gated3-foot-wide opening shall be left open on the opposite side of construction to allow for required monitoring by City staff and the applicant’s Arborist of Record. Openings shall be spaced every 100 feet or at a rate of one per tree.</p> <p>4.6-41 The applicant shall be required to install proper signage that reads “THIS FENCE IS FOR THE PROTECTION OF OAK TREES AND SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION BY THE CITY ARBORIST”.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-42 The applicant shall be required to submit a copy of all future site plans including but not limited to grading plans, street improvement plans, construction plans and landscape plans to the City of Santa Clarita Oak Tree Specialist. All site plans shall require written approval from the City’s Urban Forestry Division.</p> <p>4.6-43 Any oak tree approved for relocation (presently Tree No. 31 is proposed for relocation) shall be completed by an approved qualified tree relocating company.</p> <p>4.6-44 Any oak tree proposed for relocation shall be considered a removal. Any oak tree that has been approved for relocation shall require an up to 90 day side box waiting period before bottom roots may be removed. The final waiting period shall be established by the Arborist of Record and the City’s Oak Tree Specialist.</p> <p>4.6-45 Any oak tree which has been approved for relocation shall require a minimum five year mitigation period, which shall include the submittal of all maintenance and monitoring records completed on the tree. Monitoring reports shall be submitted at the end of each month for the first two years, quarterly (four times per year) for the following two years and biannually for the final year. The bond (based upon a value equivalent to the oak tree’s ISA value) for the relocated tree will not be exonerated until the completion of the required mitigation period.</p> <p>4.6-46 The applicant shall be required to incorporate large scale trees, which include 48 inch and 60 inch box trees into its mitigation plan. This may also include the installation of specimen size trees that range from 72 inch box in size up to 84 inch box trees.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.6 BIOLOGICAL RESOURCES (continued)		
	<p>4.6-47 Mitigation oak trees may include the following native species of oak; Coast live oak (<i>Quercus agrifolia</i>), or Canyon oak (<i>Quercus chrysolepis</i>). Incorporating additional native species in areas immediately adjacent to where established oak trees are present, may have a negative impact on the existing oak trees and is not permitted.</p> <p>4.6-48 The applicant shall comply with all additional requirements of the project's adopted oak tree permit.</p>	
4.7 LAND USE		
The proposed project would not result in any potentially significant impacts relative to land use.	No mitigation measures are required.	Project-related impacts would be less than significant.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.8 WATER SERVICE		
<p>The proposed project's water demand would be met by relying on three primary sources of water supply; namely, groundwater from the Alluvial aquifer, State Water Project water, and recycled water from the proposed project's water reclamation plan (WRP). In comparing the proposed WRP's capacity (approximately 443 afy) and the project's recycled water demand of approximately 194 afy, there is anticipated to be an excess of recycled water from the plant of approximately 311 afy on average. This excess (311 afy) is greater than the project's total potable water demand of approximately 303 afy. Based on the information presented in this EIR, an adequate supply of water is available to serve the Vista Canyon project, and the project would not create, or contribute to, any significant project-specific or cumulative water supply impacts in the Santa Clarita Valley.</p>	<p>4.8-1 The proposed project shall implement a water recycling system in order to reduce the project's demand for imported potable water. The project shall install a distribution system to deliver recycled water to irrigate land uses suitable to accept reclaimed water, pursuant to Los Angeles County Department of Health Standards. Uses include retail, office, and commercial spaces. Such uses shall be dual-plumbed to receive recycled water for toilet facilities.</p> <p>4.8-2 Landscape concept plans shall include a palette rich in drought-tolerant and native plants.</p> <p>4.8-3 Water conservation measures as required by the State of California shall be incorporated into all irrigation systems.</p> <p>4.8-4 In conjunction with the submittal of applications that permit construction, and prior to approval of any such permits, the City of Santa Clarita shall require the applicant of the permit to obtain written confirmation from the retail water agency identifying the source(s) of water available to serve the project concurrent with need.</p> <p>4.8-5 Prior to commencement of use, all uses of recycled water shall be reviewed and approved by the State of California Health and Welfare Agency, Department of Health Services.</p> <p>4.8-6 Prior to the issuance of building permits that allow construction, the applicant of the project shall finance the expansion costs of water service extension to the project through the payment of connection fees to the appropriate water agency(ies).</p>	<p>The proposed project would not result in or contribute to any significant unavoidable impacts on Santa Clarita Valley water resources.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.8.1 WATER QUALITY		
<p>The project would generate pollutants typical of urban residential and commercial areas during construction, and after the site is built out and occupied. Taking into account the project’s non-structural and structural (treatment) project design features (PDFs), and evaluating the identified pollutants of concern, water quality impacts would be less than significant.</p> <p>The proposed WRP treatment processes would incorporate best practicable treatment and control measures, which would be regularly maintained and optimally operated. With mitigation, percolation of recycled water from the project would not result in a violation of the groundwater quality standards for minerals (TDS, chloride, sulfate, and boron). Impacts to all other groundwater pollutants of concern would be prevented by the incorporation of best practicable treatment and control measures in the WRP treatment processes. Based on the analysis for the pollutants of concern in groundwater, the project would not result in a violation of any groundwater quality standards or waste discharge requirements or otherwise substantially degrade water quality. On this basis, the project's impact on groundwater quality is considered less than significant.</p>	<p>4.8.1-1 The project applicant shall be required to implement all Project Design Features (PDFs), as outlined in Subsection 5 (Project Design Features) of this section.</p>	<p>With implementation of the mitigation measure, water quality impacts would be reduced to less than significant levels. Therefore, no significant unavoidable impacts are anticipated.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.9 SOLID WASTE DISPOSAL		
<p>Upon buildout of the proposed Vista Canyon project and assuming no solid waste would be recycled (a worst-case scenario), the proposed project would generate a total of 47,500.7 pounds of solid waste per day, or approximately 8,668.9 tons of solid waste per year. The proposed project with the residential overlay option would generate a total of 11,820.2 pounds of solid waste per day, or approximately 2,157.2 tons of solid waste per year. It can be assumed that the proposed project would meet the current recycling goals of the community and, therefore, generate approximately 4,334.4 (without overlay) or 1,078.6 (with overlay) tons of solid waste per year. The recycled water diversion rate is based on the most recent City diversion rate of 54 percent of waste disposal.</p> <p>Cumulative development under the Santa Clarita Valley Build-Out scenario would generate 468,789 tons per year of solid waste with the proposed project and 468,409 tons per year of solid waste with the proposed project with the residential overlay option, as well as hazardous waste. The proposed project's 8,668.9 tons per year (without recycling) would represent 1.8 percent of this Valley-wide total and the proposed project with the residential overlay option's 2,157.2 tons per year (without recycling) would represent 0.46 percent of this Valley-wide total.</p>	<p>4.9-1 Recycling/separation areas will be located in close proximity to dumpsters for non-recyclables, elevators, loading docks, and primary internal and external access points.</p> <p>4.9-2 Recycling/separation areas will not conflict with any applicable federal, state, or local laws relating to fire, building, access, transportation, circulation, or safety.</p> <p>4.9-3 Recycling/separation areas will be conveniently located for those persons who deposit, collect, and load the recyclable materials.</p> <p>4.9-4 Recycling containers/bins will be located so as to not block access to each other.</p> <p>4.9-5 Yard waste will be reduced through the use of xeriscaping techniques and the use of drought-tolerant and native vegetation in common area landscaping, wherever possible.</p> <p>4.9-6 For commercial developments and residential buildings having five or more living units, no refuse collection or recycling areas will be located between a street and the front of a building.</p> <p>4.9-7 On-site trash compactors will be installed for non-recyclables in all restaurants/food services areas.</p> <p>4.9-8 The project will comply with City recycling requirements, including the number and location of recycling and waste bins.</p> <p>4.9-9 First-time buyers and businesses will receive educational material on the City's waste management efforts. Educational material shall be passed to consecutive buyers using the CC&Rs.</p>	<p>Even with mitigation, the project's solid waste disposal impacts would be considered significant and unavoidable.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.9 SOLID WASTE DISPOSAL (continued)		
<p>Cumulative development under the proposed One Valley One Vision (OVOV) General Plan scenario would generate 429,655 tons of solid waste per year. The proposed project would cumulatively contribute approximately 8,668.9 tons of solid waste per year, or 2.0 percent of the total amount of solid waste that is expected to be generated by buildout under the proposed OVOV General Plan. The proposed project with the residential overlay option would also cumulatively contribute by generating approximately 2,157.2 tons of solid waste per year, or 0.5 percent of the total amount of solid waste that is expected to be generated by buildout under the proposed OVOV General Plan.</p> <p>There is potential for alternative solid waste disposal technologies to be developed and legislatively approved in the future given the market forces that drive the solid waste industry, which could substantially reduce landfill disposal. However, until other disposal alternatives adequate to serve existing and future uses for the foreseeable future are employed, the potential project and cumulative solid and hazardous waste impacts are considered significant and unavoidable.</p>	<p>4.9-10 The applicant shall comply with all applicable state, regional, and local regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.</p> <p>4.9-11 During construction, recycling bins for glass, metals, paper, wood, plastic, greenwastes, and cardboard will be placed on site to ensure their use by construction workers and will be trucked to recycling/processing facilities.</p> <p>4.9-12 In construction specification and bid packages, building materials made of recycled materials will be required, to the extent possible and feasible.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.10 EDUCATION		
<p>The Sulphur Springs Union School District (Sulphur Springs District) and the William S. Hart Union High School District (Hart School District) currently provide public elementary, junior/middle school, and senior high school education in the Vista Canyon project area. The Vista Canyon project would generate an estimated 375 new elementary school students, 56 junior high students, and 112 high school students. With implementation of the residential overlay, the proposed project would generate up to 454 elementary school students, 66 junior high school students, and 132 high school students.</p> <p>Implementation of the School Facilities Mitigation Agreement between the Sulphur Springs District and the applicant (dated May 27, 2009) and the Agreement for Fair Share Funding of School Facilities between the Hart District and the applicant would mitigate all project impacts to less than significant levels.</p>	<p>Project participation in the identified mitigation funding agreements with the Sulphur Springs District and Hart District fully mitigates project impacts to education services. No further mitigation is proposed or required.</p>	<p>Compliance with the provisions of the mitigation funding agreements, entered into between the applicant and the Sulphur Springs District and Hart District, would reduce impacts to school facilities to less than significant. Therefore, no significant unavoidable project impacts would occur.</p> <p>The proposed project does not cumulative contribute to impacts on school facilities in the Valley because project-level impacts have been fully mitigated. Moreover, by complying with existing</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.10 EDUCATION (continued)		
<p>Cumulative student generation under the Santa Clarita Valley Build-Out Scenario cannot be accommodated by existing or planned facilities within the school facilities that serve the Valley; therefore, cumulative impacts would be potentially significant. Compliance, as appropriate, with the referenced mitigation agreements and/or other mechanisms (e.g., Senate Bill 50 (SB 50), the Valley-Wide Joint Fee Resolution, and/or new school facilities funding agreements) would reduce cumulative impacts on the school districts to less- than- significant levels, such that no significant unavoidable cumulative impacts to educational services are anticipated.</p>		<p>school facilities/funding agreements and/or other mechanisms (e.g., SB 50, the Valley-Wide Joint Fee Resolution, or new school facilities/funding agreements), cumulative development within the Santa Clarita Valley is expected to reduce identified cumulative impacts on school facilities to less than significant levels. Therefore, no significant unavoidable cumulative impacts would occur.</p>
4.11 LIBRARY SERVICES		
<p>Based on the County Library’s service level guidelines of 0.50 square foot of library facilities per capita and a collection size of 2.75 items (i.e., books, magazines, periodicals, audio, video, etc.) per capita, buildout of the proposed Vista Canyon project would require a total of 9,489 items, 1,725 square feet of library facilities, and 3.5 public access computers. The proposed project, with implementation of the residential overlay, would require a total of 11,468 items, 2,085 square feet of library facilities, and 4 public access computers. Payment of the City of Santa Clarita's adopted library impact fee of \$718.00 per new residential dwelling unit (as of February 2010), which accounts for the funding needed to construct new library facilities and acquire library resources, would ensure that the proposed project would not impair library services, and reduce any potential impact to a less- than- significant level</p>	<p>Provided that the project applicant pays the required library facilities fee, no further mitigation would be required.</p>	<p>With payment of the required library facilities fees, the proposed project’s library services impacts would be below significant, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.12 PARKS AND RECREATION		
<p>The proposed project incorporates approximately 18 acres of formal active/passive park or recreational uses, including the approximately 7-acre Oak Park and 1-acre River Education Center, both of which are proposed for dedication to the City. Other recreational facilities include the Community Garden, Town Green, up to six private recreational facilities and project trails. The proposed project trails extend over 4 miles both on and off the project site, including significant extensions of the Santa Clara River Trail. The project's trail system would provide: (i) access to the regional trail network and open areas; and (ii) connections between living areas, shopping, work, entertainment, schools, and civic and recreational facilities. The proposed project satisfies the City's parkland standards through a combination of parkland, private recreation facilities and payment of fees and, therefore, would not result in significant unavoidable impacts to local parks and recreation facilities.</p>	<p>4.12-1 Consistent with the Vista Canyon Specific Plan, development of the project shall provide the following parks and open areas:</p> <ul style="list-style-type: none"> • Eight acres of public parkland with improvements, including the Oak Park and the River Education Center; • Five acres of private recreation facilities and 5 acres of trails; and • Dedication of the Santa Clara River Corridor on site. <p>4.12-2 The project applicant, or its designee, will meet City parkland requirements by providing either the dedication of land, payment of in-lieu fees, construction of park amenities, or any combination of the three as approved by the Director of Parks, Recreation and Community Services, prior to issuance of building permits.</p>	<p>With implementation of the identified mitigation measures, the proposed project's parks and recreation impacts would be mitigated to below a level of significance, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.13 FIRE SERVICES		
<p>The project applicant would pay fire facility fees, which would be used to help fund the construction of new facilities and purchase of additional equipment. In addition, tax revenues generated by the project would assist in securing additional equipment and hiring of firefighter personnel for the Los Angeles County Fire Department. The proposed project also would comply with City codes and requirements relative to the provision of adequate fire protection services to the site during both the construction and operational stages of the project. As a result, the proposed project would not diminish the staffing or the response times of existing fire stations in the City of Santa Clarita, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels in the City. In summary, with mitigation, the proposed project would not have a significant project-specific or cumulative impact on fire protection services in the City of Santa Clarita.</p>	<p>4.13-1 Concurrent with the issuance of building permits, the project applicant shall pay fire facilities fees to the satisfaction of the City of Santa Clarita.</p> <p>4.13-2 The project applicant shall prepare a Final Fuel Modification Plan, and Landscape and Irrigation Plan, as required for projects located within a Very High Fire Hazard Severity Zone. These two plans shall be submitted to and approved by the Los Angeles County Fire Department prior to building construction. The Final Fuel Modification Plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision.</p> <p>4.13-3 The project shall provide water mains, fire hydrants and fire flows, as required by the Los Angeles County Fire Department, for all land shown on the map that shall be recorded.</p> <p>4.13-4 Brush clearance shall be conducted prior to the initiation of construction activities in accordance with City of Santa Clarita and Los Angeles County Fire Department requirements.</p> <p>4.13-5 Adequate water availability shall be available to service any fire suppression activities that arise during the construction phase of the project.</p>	<p>With implementation of each of the identified mitigation measures, the proposed project's fire protection impacts would be mitigated to below a level of significance, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.13 FIRE SERVICES (continued)		
	<p>4.13-6 Vehicular access must be provided and maintained throughout construction to all required fire hydrants. All required fire hydrants shall be installed, tested and accepted or bonded prior to construction. All hydrants shall measure 6 inches by 4 inches by 2.5 inches brass or bronze, conforming to current AWWA standard C503 or approved equal. Additionally, the following fire hydrant standards shall be met:</p> <ul style="list-style-type: none"> • Fire hydrant spacing shall be 300 feet. • No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant. • No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant. • Any cul-de-sac proposed for the project site that’s street length exceeds a depth of 200 feet, shall be required to place fire hydrants at the corner and mid-block of the cul-de-sac. • Additional hydrants will be required if the hydrant spacing exceeds specified distances. • These hydrants shall be located as per the vesting tentative tract map on file with the Fire Department. <p>4.13-7 Fire Department access shall be extended to within 150 feet distance of any exterior portion of all structures.</p> <p>4.13-8 All fire lanes must not be less than 26 feet paved width (clear to sky and unobstructed) and posted and red curbed “NO PARKING – FIRE LANE.”</p> <p>4.13-9 Private driveways shall be indicated on the final vesting tract map as “Private Driveway and Fire Lane,” with the widths clearly depicted, and shall be maintained in accordance with the Fire Code.</p> <p>4.13-10 The applicant shall provide the Los Angeles County Fire Department or City of Santa Clarita with approved street signs and building access numbers prior to occupancy of the project site.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.14 SHERIFF SERVICES		
<p>Implementation of the proposed project would increase the demand for law enforcement and traffic-related services both on the project site and within the local vicinity in terms of the number of personnel and the amount of equipment needed to adequately serve the project site at buildout. Based on the Sheriff Department's standard deputy-to-resident ratio, the proposed project (including the residential overlay component) would require the services of four additional sworn Sheriff Department officers. Payment of the law enforcement facilities fees and new tax revenues would mitigate impacts to the Sheriff Department to a less- than- significant level. Thus, the proposed project would not contribute to any cumulatively considerable impacts to sheriff services.</p> <p>The proposed project also would increase demands for CHP services in the project area. Through increased revenues generated by the proposed project (via motor vehicle registration and drivers license fees paid by new on-site residents and businesses), the project would generate more than sufficient funding for the additional staffing and equipment would needed to serve the project area, including future demands. This funding can and should be allocated to the CHP by the state CHP for the Santa Clarita Valley station to meet project demands. Therefore, project impacts to the CHP would be less- than-significant, and would not contribute to any cumulatively considerable impacts to CHP services.</p>	<p>4.14-1 During construction, the project applicant, or its designee, shall retain the services of a private security firm to patrol the project site.</p> <p>4.14-2 Prior to construction activities, the project applicant shall have a construction traffic control plan approved by the City of Santa Clarita.</p> <p>4.14-3 As final development plans are submitted to the City of Santa Clarita for approval in the future, the Sheriff Department design requirements that reduce demands for service and ensure adequate public safety shall be incorporated into the building design. The design requirements for this project shall include:</p> <ul style="list-style-type: none"> • Proper lighting in open areas and parking lots; • Sufficient street lighting for the proposed project's streets; • Good visibility of doors and windows from the streets and between buildings on the project site; and, • Building address numbers on both residential and commercial/retail uses are lighted and readily apparent from the streets for emergency response agencies. <p>4.14-4 Project design shall include, to the extent feasible, low-growing groundcover and shade trees, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas.</p> <p>4.14-5 The project applicant, or designee, shall pay the City's law enforcement facilities impact fee in effect at the time of issuance of a building permit.</p>	<p>With implementation of the identified mitigation measures, the proposed project's sheriff services impacts would be mitigated to below a level of significance, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.14 SHERIFF SERVICES (continued)		
<p>Construction of the proposed project would increase both the incidence of petty crimes on the site and construction traffic on SR-14 and surrounding roadways, which may potentially delay emergency vehicles traveling through the area. However, by retaining the services of a private security company to patrol the project construction site, and by implementing a construction traffic control plan, any potentially significant construction-related impacts to law enforcement services would be reduced to a less- than-significant level.</p>		
4.15 HUMAN-MADE HAZARDS		
<p>One of the Phase I Environmental Site Assessments prepared for the PA-2 and PA-3 portions of the project site concluded that there is a potential for the presence of metals, total petroleum hydrocarbons, volatile organic compounds, and pesticides on the site; it recommended that, prior to grading activities, soil samples be collected from:</p> <ul style="list-style-type: none"> • debris piles and from the locations of the removed debris piles, • areas that have historically been used for agricultural development, and • the location of the former Southern Pacific Railroad at the southern boundary of the site. <p>With mitigation, the proposed project would not result in a significant impact to human-made hazards.</p>	<p>4.15-1 Prior to grading, areas of the project site indicated on Figure 4.15-1 shall be sampled for the presence of metals, total petroleum hydrocarbons, volatile organic compounds, and pesticides. If the presence of hazards is identified, the area(s) shall be remediated in accordance with federal and state law prior to grading of that portion of the project site.</p> <p>4.15-2 Prior to demolition activities, an asbestos survey shall be conducted by a qualified environmental professional to determine the presence or absence of asbestos at the existing, on-site, single-family residence. The survey shall be submitted to the City of Santa Clarita. If present, asbestos removal shall be performed by a State-certified asbestos containment contractor in accordance with the Toxic Substance Control Act (15 U.S.C. Section 2601 et. seq.).</p>	<p>There will be no significant unavoidable impacts relating to human-made hazards with implementation of the recommended mitigation measures.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.16 VISUAL RESOURCES		
<p>The proposed project would result in potentially significant impacts arising from the creation of new sources of light and glare associated with construction-related activities.</p>	<p>4.16-1 The project applicant, or designee, shall require that the use of nighttime lighting during project construction be limited to only those features on the construction site requiring illumination.</p> <p>4.16-2 The project applicant, or designee, shall require that all security lights be properly shielded and projected downwards during construction, such that light is directed only onto the work site.</p> <p>4.16-3 The project applicant, or designee, shall require that all outdoor lighting along the project site boundary consist of low-intensity downlights, or be equipped with louvers, shields, hoods or other screening devices.</p> <p>4.16-4 The project applicant, or designee, shall require that all outdoor lighting along the project site boundary be projected downwards to illuminate the intended surface and minimize light spillover and glare generation.</p> <p>4.16-5 The project applicant, or designee, shall require that only low-reflective building materials be used on building exteriors.</p>	<p>With implementation of the mitigation measures, project-specific impacts related to light and glare would be reduced to a less than significant level. Therefore, the proposed project would not result in significant unavoidable impacts to visual resources.</p>
4.17 POPULATION, HOUSING, AND EMPLOYMENT		
<p>The proposed project would not result in any significant impacts to population, housing, or employment.</p>	<p>No mitigation measures are required.</p>	<p>The proposed project would not result in any project-specific significant unavoidable impacts relative to population, housing, or employment.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.18 CULTURAL RESOURCES		
<p>Phase I and II archaeological surveys and test excavations for cultural resources on the project site were undertaken in 2008 and 2009. These surveys have resulted in the discovery and recording of one prehistoric and two historic archaeological sites. The prehistoric site is a small, low-density campsite with subsurface deposits. The two historical sites include the Mitchell family cemetery and remnants of the Mitchell family homestead. The project would preserve both of these identified sites. Inadvertent direct and/or indirect disturbance during construction of the proposed project to any on-site sensitive cultural resource would be considered a significant impact. Accordingly, mitigation measures are proposed that would reduce the magnitude of potential impacts to cultural resources to less than significant levels.</p>	<p>4.18-1 Site VC-1/H contains an intact subsurface deposit and artifacts that hold the potential for contributing to the understanding of the prehistory of this portion of California. A Phase III data recovery (salvage excavation) program shall be conducted on Site VC-1/H prior to grading activities.</p> <p>4.18-2 Site VC-2/H contains the remains of the Mitchell family homestead, which may contain important subsurface archeological deposits. A Phase III data recovery (salvage excavation) program shall be conducted on Site VC-2/H prior to grading activities.</p> <p>4.18-3 In the event that cultural resources are found during construction, activity shall stop and a qualified archaeologist shall be contacted to evaluate the resources. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation will be made available. Construction on other parts of the project site may proceed in accordance with Public Resources Code section 21083.2(i).</p>	<p>With implementation of the identified mitigation measures, the proposed project's cultural resource impacts would be mitigated to below a level of significance, and no significant unavoidable impacts would occur.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.18 CULTURAL RESOURCES (continued)		
	<p>4.18-4 If, during any phase of project construction, there is the discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps, which are based on Public Resources Code section 5097.98 and <i>State CEQA Guidelines</i> section 15064.5(e), shall be taken:</p> <ol style="list-style-type: none"> 1. There will be no further excavation or disturbance of the site or any nearby area reasonably susceptible to overlying adjacent human remains until: <ol style="list-style-type: none"> a. The Los Angeles County Coroner is contacted to determine that no investigation of the cause of death is required; and b. If the Coroner determines the remains to be Native American: <ol style="list-style-type: none"> (i) The Coroner shall contact the Native American Heritage Commission within 24 hours; (ii) The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and (iii) The most likely descendent may make recommendations to the Project applicant for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or, 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.18 CULTURAL RESOURCES (continued)		
	<p>4.18-4 (continued)</p> <p>2. Where the following conditions occur, the project applicant, or its designee, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:</p> <ul style="list-style-type: none"> a. The Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 24 hours after being notified by the Commission; b. The descendant identified fails to make a recommendation; or c. The project applicant, or its designee, rejects the recommendation of the descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the project applicant. 	
4.19 AGRICULTURAL RESOURCES		
<p>The proposed project would not result in potentially significant impacts to either agricultural or forest resources.</p>	<p>No mitigation measures are required.</p>	<p>There would be no significant unavoidable impacts to agricultural or forest resources with implementation of the proposed project</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS		
<p>Based on detailed biota surveys completed for the proposed project, the existing SEA/FEMA overlay boundary does not correspond to the sensitive riparian and jurisdictional resources within the project site. Therefore, the project proposes a General Plan Amendment, which would revise both the land use designation for the Vista Canyon property to SP (Specific Plan), and adjust the existing SEA/FEMA overlay boundary to correspond to the area to be designated SP-OS (open space within the Santa Clara River Corridor). Proposed project impacts to biological resources within the existing SEA/FEMA overlay area would not be considered significant because the project design proposes to minimize impacts to jurisdictional and sensitive riparian-associated resources on site, and assure project compatibility with ongoing ecological functions of the post-project SEA/FEMA overlay area.</p>	<p>4.20-1 The project applicant shall implement the Wetlands Plan, 2009, in order to:</p> <ul style="list-style-type: none"> (a) Satisfy the mitigation requirements of local, state, and federal agencies for wetland and riparian habitat; (b) Create or restore riparian and riverine vegetation communities suitable for nesting, foraging, and breeding by native animal species; (c) Create or restore vegetation communities to be compatible with the fluvial morphology and hydrology of the stream channel corridor; (d) Create or restore vegetation communities to be consistent with adjacent, existing riparian vegetation communities; and (e) Create or restore vegetation communities to be self-sustaining and functional beyond the maintenance and monitoring period. <p>In implementing the Wetlands Plan, 2009, the applicant shall implement the maintenance activities during the specified monitoring, the monitoring plan for the mitigation areas, the reporting requirements, and the contingency measures specified in that plan. The applicant also must satisfy the performance standards and success criteria set forth in that plan. The maintenance and monitoring will be subject to approval of the City's Community Development Department.</p>	<p>There would be no significant unavoidable impacts to the Santa Clara River SEA/FEMA overlay within the project reach with implementation of the mitigation measures, including those contained in Sections 4.2 and 4.6.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS (continued)		
	<p>4.20-2 Prior to grading and construction activities, a qualified biologist shall be retained to conduct a worker environmental awareness program for all construction/contractor personnel. A list of construction personnel who have completed training prior to the start of construction shall be maintained on site and this list shall be updated as required when new personnel start work. No construction worker may work in the field for more than five days without participating in the program. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:</p> <ul style="list-style-type: none"> • Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements; • A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of non-compliance with these acts; • Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts); 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS (continued)		
	<p>4.20-2 (continued)</p> <ul style="list-style-type: none"> • Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance; • Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife; • Review/designate the construction area in the field with the contractor in accordance with the final grading plan; • Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected); • Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity; • Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas; • Ensure and document that required pre-construction surveys and/or relocation efforts have been implemented; and • Be present during initial vegetation clearing and grading. 	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS (continued)		
	<p>4.20-3 Prior to construction the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, and other special-status reptile species. The plan shall include, but not be limited to, the timing and location of the surveys that would be conducted for each species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and provide for the documentation/recording of the species and number of the animals relocated. The plan shall be submitted to the City 60 days prior to any ground disturbing activities within potentially occupied habitat.</p> <p>The plan shall include the specific survey and relocation efforts that would occur for construction activities during the activity period of the special-status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, oak woodland, riparian habitats, or other areas supporting these species, qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, and other special-status reptile species in order to avoid or minimize impacts to such species. The plan shall require a minimum of two (2) surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low activity period (generally December through February), the surveys shall be conducted prior to this period if possible. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS (continued)		
	<p>4.20-3 (continued) Results of the surveys and relocation efforts shall be provided to City in an annual mitigation status report.</p> <p>4.20-4 Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on site (typically March through August in the project region, or as determined by a qualified biologist), the applicant shall have surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet of the disturbance zone. Pre-construction surveys shall include nighttime surveys to identify active rookery sites. The total number of surveys shall be determined by the on-site qualified biologist based on the construction/grading schedule.</p> <p>If active nests are found, clearing and construction within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFG in an annual mitigation status report.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 SANTA CLARA RIVER CORRIDOR ANALYSIS (continued)		
	<p>4.20-5 Thirty days prior to construction activities in grassland, scrub, oak woodland, riverbank, or other suitable habitat, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and other special-status mammals.</p> <p>If San Diego black-tailed jackrabbits or other special-status species are present, non-breeding mammals shall be flushed from areas to be disturbed. Occupied dens, depressions, nests, or burrows shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with the City and CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to the City with a copy to CDFG.</p>	

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.21 WASTEWATER DISPOSAL		
<p>The proposed project, at buildout, would generate a worst-case, average total of 214,265 gpd of wastewater that would be treated by the proposed Vista Canyon WRP and Valencia WRP (solids only). These two WRPs have adequate capacity to accommodate the proposed project's anticipated wastewater generation. For this reason, wastewater disposal impacts would not be significant on a project-specific or cumulative level.</p>	<p>4.21-1 Upon completion of the WRP, the applicant shall dedicate the WRP property to the City of Santa Clarita.</p> <p>4.21-2 A 395,411 gallon per day water reclamation plant shall be constructed on the Vista Canyon Specific Plan site, pursuant to local, regional, state and federal design standards (as applicable), to serve the Vista Canyon Specific Plan. The project applicant shall assign the responsibility for ownership, operation, and maintenance of the water reclamation plant to the City of Santa Clarita.</p> <p>4.21-3 All facilities of the sanitary sewer system, including the siphon, will be designed and constructed for maintenance by the City of Santa Clarita in accordance with the applicable manuals, criteria, and requirements.</p> <p>4.21-4 The project applicant shall require construction contractors to provide portable, on-site sanitation facilities that will be serviced by approved disposal facilities and/or treatment plants.</p> <p>4.21-5 Prior to issuance of building permits, the project applicant shall obtain a "will-serve" letter from the County Sanitation Districts of Los Angeles County verifying that treatment capacity is adequate.</p> <p>4.21-6 All local wastewater lines within the project boundaries are to be constructed by the project applicant and dedicated to the City of Santa Clarita Transportation and Engineering Services Department.</p> <p>4.21-7 Prior to issuance of building permits, the project applicant shall pay applicable wastewater connection fees.</p>	<p>Provided that the mitigation measures are implemented, no significant unavoidable wastewater disposal impacts would result from implementation of the proposed project.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.22 GLOBAL CLIMATE CHANGE		
<p>The proposed project's CO₂e emissions are 28.8 percent below the level that would be expected if the proposed project were constructed consistent with the assumptions in the California Air Resources Board's projections for 2020 if "no actions are taken" (California Air Resources Board [CARB] 2020 NAT scenario). As noted in the Scoping Plan, a reduction of 28.5 percent below the CARB 2020 NAT scenario is required to meet the goals of AB 32. Therefore, the proposed project would not impede implementation of AB 32 as its reduction below the CARB 2020 NAT scenario is greater than that required, and project impacts are less than significant. To guarantee implementation and otherwise ensure that impacts are not significant, the project's design features that reduce GHG emissions are recommended for adoption as mitigation measures.</p>	<p>4.21-7 (continued) Project Design Features:</p> <ul style="list-style-type: none"> • The project applicant or designee shall design all residential buildings on the project site to provide improved insulation and ducting, low E glass, high efficiency air conditioning units, and radiant barriers in attic spaces, as needed, or equivalent to ensure that all residential buildings operate at levels 20 percent better than the standards required by the 2008 version of Title 24 at the time building permit applications are filed. • The project applicant or designee shall provide Energy Star major appliances, where available and applicable, in all residential and commercial buildings on the project site. • The project applicant or designee shall design all nonresidential buildings on the project site to provide improved insulation and ducting, low E glass, high efficiency HVAC equipment, and energy efficient lighting design with occupancy sensors or equivalent to ensure that all commercial and public buildings operate at levels 20 percent better than the standards required by the 2008 version of Title 24 at the time building permit applications are filed. • The project applicant or designee shall produce or purchase renewable electricity equivalent to the installation of an 80,000-square-foot photovoltaic rooftop power system on residential or non-residential buildings on the project site. • Consistent with the Governor's Million Solar Roofs Plan, the project applicant or designee, acting as the seller of any single-family residence constructed as part of the development of at least 50 homes that are intended or offered for sale, shall offer a solar energy system option to all customers that enter negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete. The seller shall disclose the total installed cost of the solar energy system option, and the estimated cost savings. • The project applicant or designee shall use solar water heating for all pools located on the project site. 	<p>There would be no significant unavoidable impacts relating to global climate change with implementation of the proposed project.</p>

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.22 GLOBAL CLIMATE CHANGE (continued)		
	<p>In addition to the mitigation measures set forth above, the project applicant also is pursuing implementation of two potentially feasible programs that may result in further reductions of CO₂e per year. The feasibility of the following two programs is still uncertain, but nonetheless the project applicant has committed to working with the City of Santa Clarita, Southern California Edison and Southern California Gas Company with respect to each program.</p> <p>Energy Efficient Municipal Lighting Program. The project applicant is committed to working with the City of Santa Clarita and Southern California Edison to install, where feasible, energy efficient municipal lighting throughout the project site. Annual energy costs associated with municipal lighting are lowered by 16 to 40 percent via the use of energy efficient lighting.</p> <p>Smart Meter Program. The project applicant is committed to working with Southern California Edison and Southern California Gas Company to assess the feasibility of installing smart meters at residential units throughout the project site. Although the GHG emissions reductions achieved via the implementation of a smart meter program are uncertain and there do not appear to be any authoritative references that outline the overall energy savings from smart meters, numerous studies suggest that smart meters can reduce peak demand by 10 to 20 percent and energy costs from appliance use by approximately 10 percent.</p>	
4.23 UTILITIES		
The project's impacts to utilities would be less than significant.	No mitigation measures are required.	No significant unavoidable impacts would result from implementation of the proposed project.

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.24 ANCILLARY ANNEXATION AREA		
<p>Most of the AAA is built out. As such, the proposed changes to the land use designations in the built out portion of the AAA and the re-assignment of those areas to a different land use jurisdiction, practically speaking, would not result in any potentially significant environmental impacts. Further, additional environmental review would be required before most of the currently undeveloped portions of the ancillary annexation area could be built out; the subsequent environmental review processes would evaluate impacts and identify mitigation measures in further detail than provided in this section due to the preparation of specific development plans. At this point, it is not known whether, when or how the undeveloped portions of the ancillary annexation area would be built out,</p>	<p>Design-level mitigation measures would be identified, as necessary and as feasible, during the subsequent project-level environmental review that would be undertaken prior to further buildout of the ancillary annexation area, and specifically the Sand Canyon and Jakes Way areas.</p>	<p>Because no specific development within the ancillary annexation area is proposed at this time, it is not reasonably possible to identify site-specific mitigation measures. That being said, it is reasonable to assume and recommend that further buildout within the ancillary annexation area utilize mitigation measures comparable to those recommended for the Vista Canyon project due to the similar nature of the development types. Therefore, impacts would be less than significant where identified in the Draft EIR.</p>