

unnoticeable or visually subordinate to existing predominating features. While the buildings would change the viewshed and would be noticeable, due to the scale of the project they would still be visually subordinate to the hillside and ridgeline in the background and to the east and west.

The General Plan lists Agoura Road as a scenic resource stating that “the view along Agoura Road is characterized by close-in foothill views to the south, with occasional vistas beyond the city to the north with the backdrop of rolling hills and the higher, more distant Simi Hills.” The site is at a higher elevation than Agoura Road so current views from Agoura Road are of a small but steep hillside covered in grasses. So views of the hillsides in the background are currently blocked. The project would grade the site so that the northern boundary, along Agoura Road, is at the same elevation as the roadway. This would open up views through the site and the proposed buildings would be visible from the roadway. However, since the foothills are not currently visible from the roadway, this impact would be less than significant.

Retaining walls would be part of the proposed project, but they would not be visible from US-101 or Agoura Road as they would be behind structures. Impacts would be **less than significant** and AVSP Mitigation measure AES-1 would not apply.

b, c) The AVSP FEIR identified a significant but mitigable impact with respect to removal of oak trees that are considered an important aesthetic resource at the site. Mitigation measures BIO-3(a) through BIO-3(d) were incorporated to reduce oak tree impacts. The AVSP FEIR identified a less than significant impact with respect to transformation of the visual quality of the area with implementation of development standards in the AVSP. However, the potential development of the knoll on the northeast corner of the project site was considered a significant but mitigable impact and the following mitigation measure was required:

**AES-3 Avoidance of Knolls.** The applicant shall avoid development, removal, or reduction (to include grading or blasting) of that knoll located south and east of the intersection of Agoura and Kanan Road. Although development of the knoll is unlikely, given that the Specific Plan would identify this area as Zone “G,” the applicant shall minimize earthwork in this area in order to avoid substantially modifying a scenic resource. Additionally, the applicant shall minimize grading (subject to approval of City Community Planning and Development Department)<sup>1</sup> of the knoll located south and east of the intersection of Agoura and Cornell Road. Although development and minor modifications would be allowed on the knoll, the majority of the knoll shall be preserved.

As described in the following, the proposed project would comply with this mitigation measure.

The visual character of the site is defined by hillsides, oak trees, and vegetation. The mature oak trees on the project site offer a scenic resource, with the distinct example being the knoll of oak trees on the northwestern corner of the project site near the corner of Agoura Road and Cornell Road. The City of Agoura Hills Oak Tree Preservation Guidelines provide for the protection

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<sup>1</sup> Note: This department is currently called the Planning Department



and replacement of trees that have the potential to be disturbed by development. All oak trees of the genus *Quercus* are considered to be “protected trees,” subject to the tree protection and preservation standards of the Oak Tree Preservation Guidelines. As discussed in detail in Section IV, Biological Resources, the project site is marked by oak woodland vegetation consisting of Valley Oaks (*Quercus lobata*), Coast Live Oaks (*Quercus agrifolia*), and Scrub Oaks (*Quercus berberidifolia*), all of which are protected pursuant to the Oak Tree Preservation Guidelines.

The proposed project would include a number of design features to integrate and preserve the existing oak trees on the site in accordance with AVSP requirements and the mitigation measures included in the AVSP FEIR. In accordance with Mitigation measure AES-3 in the AVSP FEIR, the knoll of oak trees on northwest corner of the project site would be preserved. Minor development and modifications of the site around the knoll would occur in order to construct a plaza, but the knoll would not be removed. In addition, development of the plaza would improve visual access to the knoll as pedestrians would be able to walk around it.

The project site is not developed and does not include any historic buildings. US-101 is not a designated state scenic highway. Therefore, the proposed project would not impact scenic resources such as historic buildings along a state scenic highway. In addition, the project site does not include any scenic rock outcroppings.

Overall, with development of the proposed project, approximately 24 oak trees would be saved in place, 29 would be removed, and six would be encroached upon during construction but are expected to survive (see Section IV, Biological Resources). The removal of oak trees is considered a potentially significant impact. However, the proposed project would involve obtaining an Oak Tree permit from the City prior to the approvals for removal of oak trees. In addition, implementation of mitigation measures CS-BIO-9 and CS-BIO-10<sup>2</sup> described in Section IV, Biological Resources, would ensure that damage to and removal of, oak trees would be avoided to the extent feasible. Moreover, implementation of the Oak Tree Preservation Guidelines and required mitigation would ensure that when development impacts to oak trees cannot be avoided, oak trees are planted or replaced so that the overall population of oak trees in the project area is not reduced and that oaks are replaced as close as possible to those removed. Implementation of the required mitigation measures would reduce the visual impacts related to the removal of oak trees to a less than significant level.

The proposed project would involve conversion of the site to an urban form with structures, parking areas, and landscaping. The hillside would be graded and the topography altered to construct buildings. During construction activities, viewers near the project site would see exposed slopes, stockpiled soils and materials, and construction equipment stored onsite.

Post-construction development would consist of a built environment with buildings up to 45 feet in height. The project site is surrounded by one- and two-story commercial development on two sides (north and west). The proposed project would introduce three-story buildings. Therefore, the proposed project would introduce larger scale buildings than those in the

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<sup>2</sup> Note: new mitigation measures included for this project that were not included in the AVSP FEIR are identified with the “CS-” prefix for “Cornerstone.”



surrounding uses. However the variability of the roofline on the buildings would break up the massing of the buildings as a whole.

Viewers react to aesthetic conditions differently based on personal and cultural perspectives. The conversion of the rural hillside to an urban development could be viewed by some as being an improvement to the area, but for those who value the rural character of the foothills, this conversion could be viewed as a substantial adverse change to the existing visual character or quality of the site and its surroundings.

As noted, the project site is almost entirely in the AVSP area and is zoned and designated for planned development. The two parcels outside of the AVSP area would remain as open space. Thus, while the visual character of the site would be transformed, the proposed project is consistent with the General Plan, Zoning Ordinance, and Agoura Village Specific Plan (see also Section X, Land Use and Planning).

The AVSP includes design standards and architectural guidelines to provide for aesthetically sensitive development. Adherence to the following AVSP development standards would reduce impacts to scenic resources and reduce the visual impacts associated with alteration of the natural topography due to development:

- *Development shall relate to the natural surroundings and grading should be minimized by following the natural contours as much as possible.*
- *Graded slopes shall be rounded and contoured to blend with the existing terrain.*
- *Significant natural vegetation shall be retained and incorporated into the project whenever possible.*
- *The natural contours of the land shall be respected when developing on sloped properties. Terraced parking lots, stepped building pads, and larger setbacks shall be used to preserve the general shape of natural landforms and to minimize grade differentials with adjacent streets and with adjoining properties.*
- *Natural amenities such as views, mature trees, creeks, riparian corridors, and similar features unique to the site shall be preserved whenever possible.*
- *Prominent and distinctive natural features of the area shall be preserved and integrated as open space for the use and visual enjoyment of all village patrons and residents.*
- *Development shall be clustered on less environmentally sensitive areas of the site to maximize open space, preservation, and resource protection.*
- *Oak trees shall be preserved and incorporated into the project whenever possible.*
- *New developments shall consider, preserve, or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and where appropriate, preserve riparian habitats to a natural state.*
- *A transition between development and adjacent open space shall be designed to help preserve the rural character of the area. Such transitions may include buffer areas and landscaping to blend development with the surrounding open area.*

Further, the AVSP includes architectural design guidelines for roofs, parapets, signage, lighting, landscaping, exterior building materials, and colors to ensure cohesive design. The proposed project would be required to adhere to the AVSP design guidelines. The project follows the natural contour by placing the buildings at progressively higher levels as the ground slopes up. The site has 59 oak trees and 30 of the trees would remain. Therefore, the project is preserving



and incorporating as many oak trees as possible. There are no riparian corridors on the site. There is an ephemeral drainage in the southwest corner of the site that would not be impacted by the project. The project would leave the eastern parcel as open space, this area as well as the proposed landscaping would act as a transition between the development and adjacent open space. Therefore, impacts would be **less than significant**.

d) The AVSP FEIR found that lighting that follows the proposed Specific Plan development standards and the City Lighting Guidelines would create a less than significant impact. However, the AVSP FEIR found that glare impacts could have a significant impact unless mitigation measure AES-4 was implemented:

**AES-4 Glare Reduction.** Project design and architectural treatments shall incorporate additional techniques to reduce glare, such as:

- *Use of low reflectivity glass*
- *Use of plant material along the perimeter of structures to soften views*
- *Brush-polishing metal surfaces and/or use of metal surfaces that are not highly reflective*

Plans for new development shall indicate the architectural treatments and/or landscaping to be implemented to reduce glare that could be generated by new development. Plans shall be reviewed by City staff and the Architectural Review Panel, for compliance with this standard prior to issuance of a Grading Permit or Building Permit.

The project site is currently undeveloped, and here are no existing sources of light or glare. The adjacent commercial uses north and west of the project site generate nighttime light and daytime glare.

The proposed project would involve development of a mixed-use project that would incorporate exterior lighting for the parking lot, pedestrian walkways, on buildings, and other safety related lighting. In addition, the windows proposed on the exterior elevations and on vehicles parked on the project site could increase the reflected sunlight during certain times of the day.

The AVSP includes development standards regulating the types, intensity, and location of night lighting. These standards would apply to the proposed project. More specifically, the following AVSP development standards apply to pole lights, spotlights, wall mounted sconces, parking lighting, and landscape lighting:

- *Sensitivity to the mix of residential / commercial uses, as well as the surrounding hillside areas, should be considered in choosing light sources and footcandle power.*
- *Lighting should be designed to provide ambiance, safety, and security without unnecessary spill over or glare onto adjacent properties. This is particularly important for the residential users who may be located on a second or third floor above a commercial use.*
- *The quality of light, level of light as measured in footcandles, and the type of bulb or source should be carefully addressed. Lighting levels should not be so intense as to draw attention to the*



*glow or glare of the project site. The lighting plan should incorporate current energy efficient fixtures and technology.*

- *Spotlighting or glare from any site lighting should be shielded from adjacent properties and directed at a specific object or target area. Exposed bulbs should not be used.*
- *Building light fixtures should be designed or selected to be architecturally compatible with the main structure which should complement the theme of the Village.*
- *Accent lighting that is downlit and focused on key architectural elements and trees can be effective and attractive, however, light sources should be screened from view.*
- *Low-voltage lighting conserves energy and should be used in the landscape whenever possible.*
- *The height of a light pole should be appropriately scaled to the building or complex and the surrounding area. Pedestrian light poles along sidewalks or pathways and parking lot light standards should be 10 feet to 15 feet high.*
- *Landscape lighting can be used to accent walkways and entries and/or seating areas and specimen plants / trees. Landscape lighting should be done with low-level, unobtrusive fixtures and limited to areas of significant landscape resources such as oak trees and mature trees.*

The project would also be required to comply with the City Lighting Guidelines through the incorporation of shielded parking lot light fixtures and illumination levels not exceeding one foot-candle measured at ground-level at property lines.

In addition, the AVSP requires the submission of a sign program with a design review application for new buildings. Lighting on signs would be subject to the following development standards to reduce light spillover and unnecessary illumination:

- *Lighting of all exterior signs should be directed to illuminate the sign without producing glare on pedestrians, autos, or adjacent residential units.*
- *Internally-illuminated sign cabinets are strongly discouraged.*

Although the proposed project would generate new sources of light, implementation of the development standards for exterior lighting would avoid the generation of significant lighting impacts. Similarly, restrictions on the use of bright colors for buildings would reduce the amount of glare that could be generated by new development in the planning area. However, the introduction of buildings and development that include reflective surfaces would result in the introduction of new sources of glare within the project site. With implementation of mitigation measure AES-4 from the AVSP FEIR, impacts would be less than significant.

### **AESTHETICS MITIGATION MEASURES**

As described previously, mitigation measure AES-1 from the AVSP FEIR would not apply. The proposed project would comply with mitigation measure AES-3 from the AVSP FEIR. Impacts related to glare would be less than significant with implementation of mitigation measure AES-4 from the AVSP FEIR. ~~This measure is listed above under subpart (d).~~ Mitigation measures BIO-3(a) through BIO-3(d) from the AVSP FEIR (described in Section IV, Biological Resources) would reduce impacts related to the removal of scenic oak trees. ~~This measure is listed above under subpart (d).~~ No additional mitigation measures are required. With these mitigation measures, all impacts related to aesthetics would be **less than significant**.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES</b>				
<p>-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES</b>				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

The project site is located at the eastern end of the AVSP area of the city of Agoura Hills, on the southeast corner of Agoura Road and Cornell Road. The vacant, hillside site has not been used for agricultural or farmland purposes and does not contain forest lands.

The AVSP FEIR found that there would be no impact with respect to agricultural resources.

a) The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared by the Farmland Mapping and Monitoring Program (California Department of Conservation, 2014). Therefore, **no impact** would occur.

b, e) The project site is not zoned for agricultural use. Additionally, the city does not have agricultural zoning or Williamson Act contracts. Therefore, there would be no conflict with zoning for agricultural use or with a Williamson Act contract, and the project would not result in the conversion of agricultural lands to non-agricultural uses. **No impact** would occur.

c) The project site is in the city of Agoura Hills and is zoned Planned Development (PD) - Agoura Village Specific Plan. Permitted land uses include a mix of retail, office, and residential uses. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **No impact** would occur.

d) The project site does not contain forest lands. Therefore, the project would not convert forest lands and **no impact** would occur.

**AGRICULTURE AND FORESTRY RESOURCES MITIGATION MEASURES**

Because would be **no significant impacts** to agriculture and forestry resources, no mitigation measures are required.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>III. AIR QUALITY</b>				
<p>-- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

The following discussion and analysis of emissions associated with the proposed project are based on outputs from the California Emissions Estimator Model (CalEEMod) (See Appendix A for air quality modeling assumptions and results).

The project site is in the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the Basin is classified as being in “attainment” or “nonattainment.” The Basin is in nonattainment for both federal and State standards for ozone and nitrogen dioxide as well as the state standard for PM<sub>10</sub> (SCAQMD, 2013). Thus, the Basin currently exceeds several State and federal ambient air quality standards and is required to implement strategies to reduce pollutant levels to recognized acceptable





standards. This non-attainment status is a result of several factors, including the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local air shed to eliminate pollutants from the air, and the number, type, and density of emission sources in the South Coast Air Basin. The health effects associated with criteria pollutants are described in Table 2.

**Table 2  
 Health Effects Associated with Criteria Pollutants**

<b>Pollutant</b>	<b>Adverse Effects</b>
Ozone	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; (f) Property damage
Carbon monoxide (CO)	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen dioxide (NO <sub>2</sub> )	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur dioxide (SO <sub>2</sub> )	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma
Suspended particulate matter (PM <sub>10</sub> )	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Decline in pulmonary function or growth in children; (c) Increased risk of premature death
Suspended particulate matter (PM <sub>2.5</sub> )	
Lead (Pb)	(a) Learning disabilities; (b) Impairment of blood formation and nerve conduction

Source: SCAQMD, 2013

<sup>a</sup> More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, *Particulate Matter Health Effects and Standard Recommendations*, [www.oehha.ca.gov/air/toxic\\_contaminants/PM10notice.html#may](http://www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may), May 9, 2002; and EPA, *Air Quality Criteria for Particulate Matter*, October 2004.

The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of State and federal air quality standards. The SCAQMD thresholds for temporary, construction-related pollutant emissions and project operations are shown in Table 3. These thresholds are utilized for the project specific analysis as well as for determining whether the project would contribute a cumulatively considerable increase to emissions.



**Table 3  
 SCAQMD Air Quality Significance Thresholds**

Pollutant	Mass Daily Thresholds	
	Operation Thresholds (lbs/day)	Construction Thresholds (lbs/day)
NO <sub>x</sub>	55	100
ROG <sup>1</sup>	55	75
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55
SO <sub>x</sub>	150	150
CO	550	550
Lead	3	3

<sup>1</sup> Reactive Organic Gases (ROG) are formed during combustion and evaporation of organic solvents. ROG are also referred to as Volatile Organic Compounds (VOC).  
 Source: SCAQMD, <http://www.aqmd.gov/ceqa/handbook/signthres.pdf>, March 2011.

In addition to the thresholds shown above, the SCAQMD has developed Localized Significance Thresholds (LST). LSTs were devised in response to concern over the exposure of individuals to criteria pollutants in local communities. LSTs have been developed for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. They represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor, and other similar factors. However, LSTs only apply to emissions generated at a fixed stationary location, including idling emissions during project construction and operation. LSTs are not applicable to mobile sources such as cars on a roadway (SCAQMD, 2003). As such, LSTs for operational emissions do not apply to onsite development as the majority of emissions would be generated by vehicle traffic on area roadways. In addition, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

LSTs have been developed for emissions in areas up to five acres in size, with air pollutant modeling recommended for activity in larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. Though the portion of the project site that will be developed (Lot 1) is 6.2 acres in size, it is assumed that construction would not occur on more than five acres on any given construction day. The project site is located in Source Receptor Area 6 (SRA-6, West San Fernando Valley). LSTs are provided for sensitive receptors at a distance of 82 feet to 1,640 feet from the project site boundary. According to SCAQMD's *Final Localized Significant Thresholds Methodology*, projects with boundaries nearer than 82 feet to the nearest receptor should use the LSTs for receptors located at 82 feet.

Sensitive receptors typically include residences, schools, hospitals and other facilities that service children and the elderly. The sensitive receptor closest to the project site is the single-



family residence on Agoura Road, approximately 25 feet east of the project’s property line. LSTs for construction on a five-acre site in SRA-6 are shown in Table 4.

**Table 4**  
**SCAQMD LSTs for Construction**

<b>Pollutant</b>	<b>Allowable emissions<sup>1</sup> (lbs/day)</b>
Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub>	221
CO	1,158
PM <sub>10</sub>	14
PM <sub>2.5</sub>	6

<sup>1</sup> Allowable emissions from site involving five acres of grading in SRA-6 for a receptor 82 feet away. Source: SCAQMD, Appendix C – Mass Rate LST Look-up Table. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>, October 2009

a) The AVSP FEIR did not address consistency with the AQMP.

According to SCAQMD Guidelines, to be consistent with the AQMP, a project must conform to the local General Plan and must not result in or contribute to an exceedance of the city’s population growth forecast. Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP.

The 2012 AQMP relied upon the projections developed by the Southern California Association of Governments (SCAG). According to SCAG growth forecasts, the population of Agoura Hills will be 21,400 by 2035 (SCAG, 2012), an increase of 189 over the current city population of 21,211 (California Department of Finance estimate, May 2016). Development of 35 residential units on the project site would cause a direct increase in the city’s population. Using the California State Department of Finance average household size for Agoura Hills of 2.83 persons, 35 dwelling units would generate a resident population of approximately 100 persons (35 units x 2.83 persons/unit). Therefore, the proposed project would result in a citywide population of approximately 21,311 persons (21,211+ 100). This increase would be within SCAG’s projected 2035 population of 21,400 for Agoura Hills.

The City General Plan and General Plan EIR project a population of 25,231 in 2035 with General Plan buildout. Since project-related population growth would be within SCAG population growth forecasts and the City General Plan buildout estimates, the project would be consistent with the AQMP. Impacts would be **less than significant**.

b, c, d) Emissions generated by the proposed project would include temporary construction emissions and long-term operational emissions. Construction-related and operational emissions associated with development of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) v.2013.2.2.



### Construction Emissions

The AVSP FEIR found that construction-related emissions would exceed SCAQMD thresholds and that impacts would be significant and unavoidable. Mitigation measures AQ-1(a) through AQ-1(c) were required to reduce emissions to the degree feasible.

#### **AQ-1(a) Fugitive Dust Control Measures:**

- Water trucks shall be used during construction to keep all areas of vehicle movements damp enough to prevent dust from leaving the site. At a minimum, this will require twice daily applications (once in late morning and once at the end of the workday). Increased watering is required whenever wind speed exceeds 15 mph. Grading shall be suspended if wind gusts exceed 25 mph.
- The amount of disturbed area shall be minimized and onsite vehicle speeds shall be limited to 15 mph or less.
- If importation, exportation and stockpiling of fill material is involved, earth with 5% or greater silt content that is stockpiled for more than two days shall be covered, kept moist, or treated with earth binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin or shall maintain at least two feet of freeboard.
- After clearing, grading, earth-moving or excavation is completed, the disturbed area shall be treated by watering, revegetation, or by spreading earth binders until the area is paved or otherwise developed.
- All material transported offsite shall be securely covered to prevent excessive amounts of dust.

#### **AQ-1(b) NOx Control Measures:**

- When feasible, electricity from temporary power poles on site shall be utilized rather than temporary diesel or gasoline generators;
- When feasible, on site mobile equipment shall be fueled by methanol or natural gas (to replace diesel-fueled equipment), or, propane or butane (to replace gasoline-fueled equipment)
- Aqueous Diesel Fuel or biodiesel (B20 with retarded fuel injection timing), if available, shall be used in diesel fueled vehicles when methanol or natural gas alternatives are not available.

#### **AQ-1(c) VOC Control Measure:**

- Low VOC architectural and asphalt coatings shall be used on site and shall comply with AQMD Rule 1113-Architectural Coatings.

The AVSP FEIR also found that grading equipment and diesel trucks used for earth export have the potential to expose sensitive populations to elevated levels of diesel exhaust. Mitigation measure AQ-2 was required to reduce impacts.



**AQ-2 Decrease Emissions** of diesel particulate matter during site grading by implementing one of the following approaches.

- Construction contractors shall not operate more than two pieces of heavy-duty diesel-powered equipment within 600 feet of any residence at any time.
- Construction contractors shall use biodiesel fuel in all on-site diesel-powered equipment. Biodiesel that is blended with low sulfur diesel fuel shall be used if available.
- Construction contractors shall use only Tier 2 diesel-powered earth moving equipment.
- At least 80% of the diesel-fueled construction equipment in terms of brake-horsepower shall have DPFs installed, or all equipment shall be equipped with diesel oxidation catalysts.
- Construction contractors shall limit the movement of large trucks to off-peak commute hours.

Project construction would generate temporary air pollutant emissions. These impacts are associated with CO and NO<sub>x</sub> from diesel equipment, fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from construction equipment, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings (i.e., paint). Construction-related emissions would also come from motor vehicles transporting construction workers to and from the project site and heavy trucks to export earth materials offsite.

Construction-related emissions were calculated using CalEEMod (see Appendix A for assumptions and calculations). Construction was assumed to occur over 24 months. It is estimated that the project will require the export of 92,500 cubic yards (CY) of earth material. Assuming an average of 16 CY per truck trip, approximately 5,782 round-trip truck trips would be needed to export the earth materials offsite.

For the purposes of modeling, it was assumed that the project would implement the provisions of AVSP FEIR mitigation measures AQ-1(a), AQ-1(b), AQ-1(c), and AQ-2 described above and comply with SCAQMD Rule 1113 regarding the use of low-VOC architectural coatings. In addition, it was assumed that the project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and which must be implemented at all construction sites in the South Coast Air Basin. Therefore, the following conditions, which would be required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the site preparation and grading phases of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved, onsite roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as



often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.

3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all onsite driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Table 5 summarizes the estimated maximum daily emissions during construction and the maximum daily onsite emissions. As mentioned previously, LSTs only apply to onsite emissions and not to mobile emissions or offsite emissions.

**Table 5**  
**Estimated Construction Maximum Daily Air Pollutant Emissions**

	Estimated Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Maximum Daily Emissions <sup>a</sup>	67.5	70.0	50.0	7.5	4.6	0.1
SCAQMD Thresholds	75	100	550	150	55	150
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Maximum On-Site Emissions <sup>b</sup>	63.3	40.4	26.7	5.4	3.7	0.03
Local Significance Thresholds (LSTs) <sup>c</sup>	n/a	221	1,158	14	6	n/a
<b>Threshold Exceeded?</b>	<b>n/a</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>n/a</b>

n/a = not applicable

<sup>a</sup> All calculations were made using CalEEMod. See Appendix A for calculations. Results shown in Table 2.1, *Mitigated Construction*, in CalEEMod winter worksheets. Winter emissions were used as a worst-case scenario. Includes emissions associated with site grading, offsite earth export, and worker trips to and from the project site. Calculations assume adherence to the conditions listed previously that are required by SCAQMD Rule 403 to reduce fugitive dust as well as Rule 1113 regarding low-VOC coatings. Lead emissions are not estimated in CalEEMod as they are assumed to be negligible.

<sup>b</sup> LSTs only apply to on-site emissions and do not apply to mobile emissions (the majority of operational emissions). Therefore, only on-site construction emissions are compared to LSTs.

<sup>c</sup> LSTs are for a five-acre project in SRA-6 within a distance of 82 feet from the site boundary

As shown in Table 5, construction emissions would not exceed SCAQMD regional thresholds or LSTs for ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub> or PM<sub>2.5</sub>. Therefore, impacts would be **less than significant**.



### Long-term Emissions

Impact AQ-3 in Section 4.2, *Air Quality*, of the AVSP FEIR discusses operational emissions. The AVSP FEIR found that emissions associated with full buildout of the AVSP would exceed SCAQMD operational significance thresholds and that impacts would be significant and unavoidable. Mitigation measures AQ-3(a) through AQ-3(d) were required to reduce emissions to the degree feasible.

- AQ-3(a) Energy Consumption.** Onsite structures shall reduce energy consumption by at least 20% below current Federal guidelines as specified in Title 24 of the Code of Federal Regulations. Potential energy consumption reduction measures include, but are not limited to, the use of photovoltaic roof tiles, installation of energy efficient windows, and the use of R-45 insulation in the roof/attic space of all onsite structures.
- AQ-3(b) Landscape Equipment.** Multi-family residential developments shall be encouraged to utilize electrical powered landscape maintenance equipment, and exterior outlets shall be installed at the front and rear of residences.
- AQ-3(c) Shade Trees.** Shade trees shall be planted to shade onsite structures to the greatest extent possible in summer, reducing indoor temperatures, and reducing energy demand for air conditioning. The City's ARB shall review project landscaping plans for consistency with this mitigation measure.
- AQ-3(d) Bus Stops.** Applicants shall provide bus stops within the Specific Plan Area. The number to be constructed will be determined in consultation with the City Traffic Engineer and the local transit agencies. Bus stops shall meet the requirements of the transit agency providing service to the City and shall include street furniture that provides shelter for passengers.

Long-term emissions associated with project operation would include emissions from vehicle trips (mobile emissions), natural gas and electricity usage (energy emissions), and landscape maintenance equipment, consumer products and architectural coating associated with the onsite development (area emissions). Vehicle trips associated with project operation are based on the trip generation estimates in the project traffic study prepared by ATE (see section XVI, *Transportation and Traffic*). Energy and area emissions are based on emissions factors contained in CalEEMod.<sup>3</sup>

Operational emissions associated with the proposed project are shown in Table 6.

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<sup>3</sup> The CalEEMod program and user's guide as well as the input files for the proposed project are available on a CD at the City of Redondo Beach, 415 Diamond Street, Redondo Beach, CA 90277.



**Table 6  
 Estimated Project Operational Emissions**

	Estimated Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Emissions	5.2	0.03	2.9	<0.01	0.02	0.02
Energy Emissions	0.1	1.0	0.8	<0.01	0.08	0.08
Mobile Emissions	10.6	21.3	91.9	0.2	12.3	3.5
<b>Total Operational Emissions</b>	<b>16.0</b>	<b>22.3</b>	<b>95.6</b>	<b>0.2</b>	<b>12.4</b>	<b>3.6</b>
SCAQMD Thresholds	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

*See Appendix A for CalEEMod output. Results shown in Table 2.2, Mitigated Operational, in CalEEMod winter worksheets. Winter emissions were used as a worst-case scenario. Operational emissions due to vehicle idling on-site are not calculated in CalEEMod but would be negligible. Numbers may not add due to rounding.*

As shown in Table 6, project emissions would not exceed SCAQMD thresholds for any criteria pollutants. Therefore, although the project would contribute to the significant impact associated with the AVSP, long-term operational impacts associated with the project itself would be less than significant.

The project applicant would be required to install energy efficiency features in accordance with mitigation measure AQ-3(a), install exterior outlets for electronic landscaping equipment in accordance with mitigation measure AQ-3(b), and plant shade trees in accordance with mitigation measure AQ-3(c) from the AVSP FEIR. The proposed project does not involve any bus stops. Therefore, mitigation measure AQ-3(d) from the AVSP FEIR would not apply.

Overall, the project’s regional temporary construction and long-term operational air quality impacts under thresholds b), c), and d) would be **less than significant with mitigation from the AVSP FEIR**.

e) As discussed in Impact AQ-4 in Section 4.2, Air Quality, of the AVSP FEIR a significant but mitigable impact was found with respect to construction of an equestrian center and trail near Medea Creek. The proposed project does not involve an equestrian center near Medea Creek. Mitigation measure AQ-4 (Equestrian Center Trail Maintenance Plan), which states as follows, would not apply.

**AQ-4 Equestrian Center and Trail Maintenance Plan.** The feasibility study for an equestrian center within the Specific Plan area, shall include provisions for a maintenance plan of both the equestrian center and related trails. The maintenance plan shall include the following measures, at a minimum:

- Organic debris/waste shall be properly disposed of or sold offsite on a regular basis,





- BMPs shall be instituted to prevent dust from moving offsite,
- BMPs (to include necessary bioswales or erosion control measures) shall be instituted to prevent organic waste, or associated nutrients from organic waste, from entering nearby water bodies.

The proposed project would involve construction of a mixed-use residential and commercial project. This type of use would not be expected to generate objectionable odors that would affect a substantial number of people. Residential, retail, office, and restaurant uses are not included on Figure 5-5, Land Uses Associated with Odor Complaints, of the 1993 SCAQMD CEQA Air Quality Handbook. Therefore, the proposed project would not generate objectionable odors and impacts would be **less than significant**.

**AIR QUALITY MITIGATION MEASURES**

Mitigation measures AQ-1(a), AQ-1(b), AQ-1(c), and AQ-2 from the AVSP FEIR, listed above under subpart (b, c, d), would apply to the proposed project. In addition, mitigation measures AQ-3(a), AQ-3(b), and AQ-3(c) from the AVSP FEIR, listed above under subsection (b, c, d), would apply. The proposed project does not involve any bus stops or equestrian centers; therefore, mitigation measures AQ-3(d) and AQ-4 from the AVSP FEIR would not apply. No additional mitigation measures are required. With these mitigation measures, air quality impacts would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IV. BIOLOGICAL RESOURCES**

-- Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IV. BIOLOGICAL RESOURCES**

-- Would the project:

vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

In February 2014, Envicom Corporation conducted a Biological Resources Inventory and Impact Analysis, including a December 2013 project site field investigation and literature review, and in July 2014, Envicom conducted a supplemental survey for rare plant species. Additionally, James Dean, A.S.L.A., I.S.A., prepared an Oak Tree Report for the project site in May 2008 and Ann Burroughs for Kay Greeley Landscape and Oak Tree Consultant prepared a supplementary oak tree memo on June 29, 2015. These studies can be found in Appendix B. Other biological surveys of the site were conducted in April 2008 (Envicom Corporation) and in 2007 (Rincon Consultants, Inc.) as part of the AVSP FEIR. The following summarizes the findings of these technical studies.

**Environmental Setting**

Agoura Hills lies in a narrow inland valley with various hills and major ridgelines rising to the Simi Hills to the north and the Santa Monica Mountains to the south, of which Ladyface Mountain is a prominent feature. The Simi Hills are an open space buffer of natural habitat between the developed suburban community of Simi Valley and the cities of Agoura Hills, Calabasas, and Westlake Village. The Santa Monica Mountains Recreation Area to the south has multiple major ridgelines, large canyons, and riparian areas. It also provides open space and natural habitat between the inland valley cities and the city of Malibu and the Pacific Coast.



The Agoura Village Specific Plan FEIR and the Biological Resources Inventory (Envicom, 2014) identify the following general vegetation types as present at the project site:

- Oak Stands
- Ruderal Series/Disturbed
- California Annual Grassland
- Valley Needlegrass Grassland
- Mixed Chaparral
- Coastal Sage Scrub

Section (b) below provides a detailed discussion of vegetation alliances present on the project site. Additional detail about the onsite plant and wildlife species is provided in section (a) below. No waters or wetlands are present onsite, as discussed under section (d) below.

### Regulatory Setting

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies with the land use control and planning authority of local jurisdictions. The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and has direct jurisdiction under the California Fish and Game (CFG) Code. Under the State and Federal Endangered Species Acts, the CDFW and the U.S. Fish and Wildlife Service (USFWS) have direct regulatory authority over species formally listed as Threatened or Endangered. The USACE has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the Federal Clean Water Act (CWA). Under Section 401 of the CWA, every applicant for a federal permit or license for activities that may result in a discharge to a water body requires State Water Quality Certification (WQC) from the Regional Water Quality Control Board (RWQCB) ensuring that the proposed activity will comply with State water quality standards. As discussed under Section (c) below, there are no jurisdictional drainages on the project site.

Plants or animals may be considered to have “special-status” due to declining populations, vulnerability to habitat change, or restricted distributions. Special-status species are classified in a variety of ways, both formally (e.g. State or Federally Threatened and Endangered Species) and informally (“Special Animals”). Species may be formally listed and protected as Threatened or Endangered by the CDFW or USFWS or as California Fully Protected (CFP). Informal listings by agencies include California Species of Special Concern (SCC, a category used by the CDFW for those species considered indicators of regional habitat changes or are potential future protected species), or as USFWS Candidate taxa. CDFW and local governmental agencies may also recognize special listings developed by focal groups (e.g., Audubon Society Blue List; California Native Plant Society’s (CNPS) California Rare Plant Rank (CRPR); U.S. Forest Service regional lists). Section 3503.5 of the CFG specifically protects birds of prey, and their nests and eggs against take, possession, or destruction. Section 3503 of the CFG also incorporates restrictions imposed by the federal Migratory Bird Treaty Act (MBTA) with respect to migratory birds (consists of most native bird species).

The City of Agoura Hills General Plan provides the framework for evaluating potential biological impacts with respect to local concerns. The General Plan Natural Resources Element



includes policies to protect biological resources. The AVSP, approved in 2008, includes the majority of the project site as discussed above. The AVSP FEIR includes specific biological resource mitigation measures, reflected in the analysis where applicable. The AVSP covers most of the parcel where sensitive resources are present and development is proposed. The City of Agoura Hills Oak Tree Ordinance provides for protection and replacement of oak trees disturbed by development. Additionally, the City has an unofficial policy that protects high value (as determined by a biologist) Coastal Sage Scrub habitat and provides for replacement of habitat that is disturbed.

Native oaks are considered a valuable natural resource by the CDFW and are protected by the City of Agoura Hills Oak Tree Ordinance (AHMC Sections 9657--9657.5). This code requires the preservation of oak trees and scrub oaks (genus *Quercus*) in recognition of their historical, aesthetic, and environmental value to the citizens of Agoura Hills. The policy applies to the removal, cutting, pruning, or encroachment into the root protection zone of an oak species. To qualify, oak trees must have a trunk diameter greater than two inches at 3.5 feet above grade.

The Los Angeles County General Plan (1993) has classified specific geographical regions as Significant Ecological Areas (SEA) based on a variety of biological criteria, including the presence of special status plant, animals, and plant communities. The project site is located adjacent to Las Virgenes SEA #22a6, which contains a number of plants common to the interior areas of Southern California but found nowhere else in the Santa Monica Mountains region. Figure NR-2 of the City of Agoura Hills General Plan Natural Resources Chapter (March 2010) shows the extent of SEA #22a6 in the city limits. Two parcels in the project site (APNs 2061-029-017 and 2061-029-029) are in SEA #22a6. Land use regulations regarding SEAs are applicable only to unincorporated county areas, and not to the proposed project inside the City's jurisdiction.

a) Special status species have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. For the purposes of this report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); wildlife species designated as "Species of Special Concern," "Fully Protected," by CDFW, and those species on the Special Vascular Plants, Bryophytes, and Lichens List (CDFW, July 2014). This latter document includes species from the CNPS Inventory of Rare and Endangered Plants (2014). Those plants with a California Rare Plant Rank (CRPR) of 1 and 2 are "special-status" species per the CNPS code definitions:

- CRPR 1A = Presumed extinct in California
- CRPR 1B.1 = Rare, Threatened, or Endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
- CRPR 1B.2 = Rare, Threatened, or Endangered in California and elsewhere; fairly endangered in California (20-80 percent occurrences threatened)



- CRPR 1B.3 = Rare, Threatened, or Endangered in California and elsewhere; Not very endangered in California (<20 percent of occurrences threatened or no current threats known)
- CRPR 2 = Rare, Threatened, or Endangered in California, but more common elsewhere
- CRPR 3 = Need more information (a Review List, most are taxonomically unresolved; some species on this list meet the definition of rarity under CNPS and CESA)
- CRPR 4.2 = Plants of Limited Distribution (watch list), fairly endangered in California (20-80 percent occurrences threatened)
- CRPR 4.3 = Plants of limited distribution (watch list), not very endangered in California (<20 percent occurrences threatened or no current threats known).

As indicated above, the CNPS also includes Lists 3 and 4. Per the CDFW (2009), these plants typically do not warrant consideration under the CEQA Guidelines §15380 unless the specific circumstances relevant to local distributions make them of potential scientific interest.

Similarly, local agencies may also consider and list additional plants to be of “local concern” because of local or regional scarcity as determined by that agency (per the CEQA Guidelines §15380). The City of Agoura Hills does not have such a list.

An evaluation of the potential occurrence for sensitive species on the project site was undertaken through research of the CDFW’s California Natural Diversity Data Base (CNDDDB) (CDFW, 2013), using the Rarefind 5 application for sensitive “elements” on the Thousand Oaks quadrangle and five others that surrounding it (Triunfo Pass, Newbury Park, Calabasas, Point Dume, and Malibu Beach). Plants that have not been observed are considered absent. For animals, there is room for considerable speculation about the potential for their occurrence on the project site on the basis of known distribution and their habitat requirements, but little actual observation. A number of special-status species are known to occur in the Santa Monica Mountains, but do not to have any potential to occur on the project site based on habitat considerations. The list of species is contained in Appendix B.

#### Special-Status Plant Species

A total of 127 vascular plant species were identified during surveys of the site. Ninety-six of the plants observed were naturally occurring native species and 31 were non-native or introduced.

Three plant species considered to be rare, threatened, or endangered occur at the site, including the Agoura Hills Dudleya (*Dudleya cymosa* ssp. *Agourensis*), Lyon’s pentachaeta (*Pentachaeta lyonii*), and Ojai Navarretia (*Navarretia ojaiensis*). No other special-status plant species are known to occur or are expected to occur at the project site, based on a potential for occurrence analysis and the results of botanical surveys conducted by Envicom in April 2008, December 2013, and July 2014, as well as the surveys conducted in 2007 during preparation of the AVSP FEIR (see Appendix B).

Plants in the fuel modification area are susceptible to impacts during fuel modification activities such as trampling, mowing, or, in the case of the Agoura Hills dudleya, being dislodged from its rock substrate. In addition, plants within landscaped or graded areas would be directly



removed. Plants that are not directly removed could be subject to “edge-effects” during construction and operation.

### *Agoura Hills dudleya*

The Federally-listed Threatened Agoura Hills dudleya is a perennial succulent herb in the stonecrop family (Crassulaceae), which grows on rocky, volcanic substrates at a small number of sites in the western Santa Monica Mountains. At the project site, this species is restricted to the rocky and exposed slopes surrounding a steep ephemeral drainage near the southwestern property boundary. There are approximately 142 Agoura Hills dudleya at the site, including 90 within the limits of the fuel modification zone, and 52 in areas that would not be impacted by the project. The dudleyas occur in steep rock gullies where vegetation removal for fuel modification is generally not feasible. No individual or population of Agoura Hills dudleyas have been detected in the grading footprint.<sup>4</sup> The observed Agoura Hills dudleyas are in the boundary of the AVSP, and impacts on this species were considered significant but mitigable, as evaluated under the 2008 AVSP FEIR.

### *Lyon’s pentachaeta*

The federally and state listed Endangered Lyon’s pentachaeta is a small annual in the sunflower family (Asteraceae), which occupies grassland sites that are ecotonal (transitional) and shrublands such as openings in chaparral, coastal sage scrub, and the edges of roads and trails. Undisturbed natural habitat of Lyon’s pentachaeta is characterized by clay soils of volcanic origin with a low proportion of total vegetative cover and exposed soils with a microbiotic crust. One Lyon’s pentacheata plant was observed onsite, on a north-facing slope in non-native grassland in an opening in scrub oak chaparral in the southern portion of the site. This plant is within the limits of fuel modification and is susceptible to impacts during fuel modification activities. No individuals or populations of Lyon’s pentachaeta have been detected in the grading footprint. The observed Lyon’s pentachaeta is within the boundary of the AVSP, and impacts on this species were considered significant but mitigable in the 2008 AVSP FEIR.

### *Ojai navarretia*

The CRPR 1B.1 Ojai Navarretia is a low and spreading annual species in the Phlox family (Polemoniaceae) that occurs on dry, clay soils in grassland habitats within openings and along the margins of coastal scrub, chaparral, and oak woodlands. At the project site, the species occurs in a dirt roadbed and with non-native grassland along the margins of scrub oak chaparral, usually where the vegetative cover of other herbaceous species is relatively low. It is currently known from approximately 10 occurrences in Ventura county and western Los Angeles County. There are 74 individual Ojai navarretia within the limits of grading, seven plants within the limits of landscaping, and 163 plants within the limits of fuel modification.

The direct loss of approximately 81 live plants and the associated seed banks of the Ojai navarretia due to grading and landscaping, and indirect impacts on 163 plants from fuel modification would be a significant but mitigable impact. Although identified individuals of

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<sup>4</sup> Included taxonomically with the Santa Monica Mountains Dudleya (*Dudleya cymosa* ssp. *ovatifolia*) in the 2014 Biological Report and Agoura Village Specific Plan FEIR. However only *Agoura Hills Dudleya* is identified as present onsite.



either species would not be directly removed by grading and development, indirect impacts to Agoura Hills Dudleya, Lyon's pentachaeta, and/or Ojai navarretia as a result of edge-effects or fuel modification activities would be a significant but mitigable impact.

Project specific and cumulative direct and indirect impacts to sensitive plant species would be **less than significant with mitigation** below.

### Special-status Wildlife Species

Thirty non-special status wildlife species were observed or detected onsite. Two reptile species were observed: California side-blotched lizard (*Uta stansburiana elegans*) and Great Basin [western] fence lizard (*Sceloporus occidentalis longipes*). The 22 bird species observed include red-tailed hawk, mourning dove, turkey vulture, Anna's hummingbirds, Nuttall's woodpecker, accord woodpecker, western scrub-jay, common raven, bushtit, wren, oak titmouse, northern mockingbird, song sparrow, California towhee, California thrasher, yellow-rumped warbler, Say's phoebe, black phoebe, ash-throated flycatcher, Cassin's kingbird, house finch, and lesser goldfinch. Two mammals were observed: California ground squirrel, and desert cottontail. In addition, four mammals inferred by sign included: big-eared woodrat, coyote, Botta's pocket gopher, and mule deer. No special status species were detected during surveys.

Special status species that could be directly impacted by the project include land-dwelling animals such as the coast horned lizard (*Phrynosoma blainvillii*) (SCC), coast patch-nosed snake (*Salvadora hexalepis virgulata*) (SCC), San Diego desert woodrat (*Neotoma lepida*) (SCC), San Diego black-tailed hare (*Lepus californicus bennettii*) (SCC), and American badger (*Taxidea taxus neglecta*) (SCC), the ground-dwelling, burrowing owl (*Athene cunicularia*) (SCC) known in the region as an overwintering transient, and a few species of special-status bats that could potentially roost in tree cavities or in tree foliage at the site. Habitat loss associated with the project would not significantly impact a population of a special-status wildlife species that would potentially occur in the area, given the relatively low acreage of habitat that would be affected and the amount of remaining suitable habitat in the surrounding area. Direct loss or injury to special-status wildlife species would be a **significant but mitigable impact**.

### Nesting Birds

Native and migratory birds are protected by the CFG and MBTA and can be expected to nest onsite during the bird nesting season, generally February 1 through August 31. Most native birds are protected under the CFG Code Section 3503 (any bird nest) and Section 3503.5 (birds of prey), or Section 3511 (Fully Protected birds). Project-related impacts to birds protected by the MBTA CFG Codes, and federal and State endangered species acts would occur during the breeding system, because unlike adult birds, eggs, and chicks are unable to escape impacts. Impacts to nesting avian species could include direct disturbances of active nesting sites during proposed project implementation by the operation of construction equipment during the clearing of proposed project disturbance areas, or by indirect disturbance due to noise impacts from human presence and use of construction equipment. The project site contains many trees, shrubs, and grasslands that provide nesting habitat for many types of birds, including the SSC (e.g., loggerhead shrike [*Lanius ludovicianus*]). In addition, the abundance of small mammals, open habitat, and presence of large trees provide excellent foraging habitat for raptors. Consequently, there is a potential for the presence of both active and inactive raptor nests, both of which are protected under the MBTA and CFG. Impacts would be **significant but mitigable**.



Project-specific and cumulative direct and indirect special-status species impacts would be less than significant with implementation of the mitigation measures listed at the end of this section, requiring pre-construction plant and wildlife surveys (CS-BIO-1, CS-BIO-4, and CS-BIO-5), preparation of a Plant Protection Plan (CS-BIO-1) and Ojai Navarretia Mitigation/Restoration Plan (CS-BIO-3), fuel modification protection of endangered or threatened plant species (CS-BIO-4), and compliance with the Migratory Bird Species Act (CS-BIO-5). Mitigation measures have been adapted from the AVSP where impacts were previously identified (i.e., Listed Plant Survey and Protection Plan, Special-Status Wildlife Surveys).<sup>5</sup>

b) Nine native and two non-native plant communities occur in the project site (includes the surrounding road improvement areas). Plant communities were correlated with those plant communities included in the *Vegetation Classification of the Santa Monica Mountains Natural Recreation Area and Environs in Ventura and Los Angeles Counties, California* (CDFW/CNPS, 2006) and/or the *List of Vegetation Alliances and Associations (Natural Communities List)* (CDFW, 2010). These documents provide comprehensive lists of officially recognized plant communities occurring in the Santa Monica Mountains and environs and in California, respectively. In these documents, each plant community is assigned a conservation status rank (also known as "rarity rank"), which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3, or S1 through S3, respectively, are considered sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, and the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

The acreage and conservation status rank of plant communities occurring at the site are provided in Table 7.

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<sup>5</sup> Note: new mitigation measures included for this project that were not included in the AVSP FEIR are identified with the "CS-" prefix for "Cornerstone."





**Table 7  
 Plant Communities and Landcover in the Project Site**

<b>Habitat Class</b>	<b>Plant Community or Landcover</b>	<b>Conservation Status Rank</b>	<b>Size (acres)</b>
Woodland	Valley Oak – Coast Live Oak/Grass Woodland Association ( <i>Quercus lobata</i> – <i>Quercus agrifolia</i> )*	G3S3	0.62
Chaparral	Scrub Oak Shrubland Association ( <i>Quercus berberidifolia</i> )	G4S4	0.74
	Scrub Oak – Toyon Shrubland Association ( <i>Quercus berberidifolia</i> – <i>Heteromeles arbutifolia</i> )	G4S4	0.71
	Scrub Oak – Birch-leaf Mountain Mahogany Shrubland Association ( <i>Quercus berberidifolia</i> - <i>Cercocarpus betuloides</i> var. <i>betuloides</i> )	G4S4	0.16
	Birch-leaf Mountain Mahogany Shrubland Association ( <i>Cercocarpus betuloides</i> var. <i>betuloides</i> )	G5S4	0.05
	Toyon Shrubland Alliance ( <i>Heteromeles arbutifolia</i> )	G5S3	0.14
Coastal Scrub	Purple Sage Shrubland Association ( <i>Salvia leucophylla</i> )	G4S4	0.08
Coastal Scrub/ Native Herbaceous	Bushy Spikemoss – California Buckwheat Association ( <i>Salaginella bigelovii</i> / <i>Eriogonum fasciculatum</i> )*	G4S3	0.35
Native Herbaceous	Purple Needlegrass Herbaceous Alliance ( <i>Stipa pulchra</i> ) [Purple or Valley Needlegrass Grassland]*	G4S3?	0.63
Non-Native Herbaceous	Non-Native Grasses and Forbs Mapping Unit	Not ranked	5.27
Other	Individual Native Trees/Shrubs	n/a	--
	Ornamental Landscaping	n/a	0.21
	Paved Road	n/a	0.83
	Barren/Sparsely Vegetated	n/a	0.06
<b>Total Acreage</b>			<b>9.85</b>

*Project site includes all properties as well as adjacent road improvement areas*

*\* CDFW Natural Community of Special Concern (Sensitive Plant Community)*

*"?" Denotes an inexact numeric rank due to insufficient samples over the full, expected range of the vegetation type, but existing information points to the rank given.*

The majority of the site (5.27 acres) is non-native grassland. Much of the lower elevation areas of the site are routinely disced or mowed, and these areas support few native species. However, much of the herbaceous community onsite is not routinely disturbed or has recovered substantially to an annual grassland community composed of various non-native and native grasses and forbs.

The following four plant communities within the project site are considered to be rare or sensitive:

- Valley Oak-Coast Live Oak/Grass Woodland Association
- Toyon Shrubland Alliance
- Purple Needlegrass Herbaceous Alliance
- Bushy Spikemoss-California Buckwheat Association

Additional information about these plant communities is provided below.



### *Valley Oak-Coast Live Oak/Grass Woodland Association*

The community occurs on approximately 0.62 acres of the project site and is considered a community of special concern by the CDFW. The understory of the woodland is of low value, being highly disturbed and composed of non-native species, but loss or disturbance to individual oak trees that make up the oak woodland would be a significant impact. Development of the proposed project would involve removal and encroachment into the canopies or root protection zones of several oak trees in the Valley Oak – Coast Live Oak/Grass Woodland Association. Oak trees in themselves are important on an individual basis as wildlife habitat, and impacts to the individual oak trees are discussed below under Section IV.e.

### *Toyon Shrubland Alliance*

This community occurs on approximately 0.14 acres of the project site and is considered a community of special concern by CDFW. This community is mostly located within the fuel modification zone. Impacts from the modification to a portion of this this community would be **less than significant**.

### *Purple Needlegrass Grassland*

This community occurs on approximately 0.63 acres of the project site and is considered a community of special concern by CDFW. This community occurs in the project footprint, and would be removed by development of the proposed project. The Agoura Village Specific Plan FEIR identified impacts to native grassland and requires specific mitigation measures that are reflected below. The City protects high value (as determined by a biologist) Coastal Sage Scrub habitat and provides for replacement of habitat that is disturbed. As evaluated in the Agoura Village Specific Plan FEIR, removal of native grassland is a **significant but mitigable impact**.

### *Bushy Spikemoss-California Buckwheat Association*

Fuel modification would impact 0.26 acres of the Busy Spikemoss-California Buckwheat Association plant community, which is a CDFW natural community of special concern. In addition, this community is a high-value coastal sage scrub, as it supports threatened and endangered species including the Agoura Hills dudleya and Lyon’s pentachaeta, as well as the non-special-status but locally rare linear-leaf goldenbrush. Impacts would be **significant but mitigable**.

With implementation of mitigation measures CS-BIO-6 and CS-BIO-7 listed at the end of this section, impacts to sensitive communities would be **less than significant**.

c) An ephemeral drainage that flows through a steep gully is located in the southwest corner of the site. The drainage does not have incised banks and lacks hydric soils or hydrophytic vegetation. However, there is evidence of hydrology, providing transport of runoff from the adjacent slopes during storm events, but flows are minimal. A high water mark is present in portions of the drainage, but is difficult to discern as flow is typically over volcanic rock. The drainage is approximately 265 linear feet and traverses through upland vegetation with a steep gradient from the southeast to the northwest ending at Cornell Road. There is no riparian vegetation at the project site. The drainage currently discharges directly onto Cornell Road and lacks a direct connection to Medea Creek or other downstream waters. For this reason as well as



the lack of riparian vegetation, the ephemeral drainage appears to be non-jurisdictional. As such, **no impact** to wetlands would occur.

d) Wildlife must be able to access suitable habitat for water, foraging, breeding and cover. Examples of barriers or impediments to movement include housing and other development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Wildlife movement corridors are physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed and fragmented landscapes. These can be critical at both the local and regional level. Wildlife movement corridors are necessary not only to access essential resources, but for dispersal and migration, to ensure the mixing of genes between populations, and so wildlife can respond and adapt to environmental stress, and thus necessary to maintain healthy ecological and evolutionary processes. The term habitat linkage typically refers to larger corridors or regions of connectivity that are important for movement of multiple species and maintenance of ecological processes at a regional scale. Wildlife crossings are generally small, narrow areas allowing wildlife to pass through an obstacle or barrier, such as a roadway, to reach another patch of habitat. Wildlife crossing include culverts, drainage pipes, underpasses, tunnels and, more recently, crossings created specifically for wildlife movement over highways.

#### Direct Impacts

Based on a review of the following documents, the project site is not in an area that has been identified as important to wildlife movement, such as a regional-scale habitat linkage or a wildlife movement corridor:

- City of Agoura Hills General Plan (March 2010)
- Agoura Village Specific Plan Updated Revised and Recirculated EIR (August 2008)
- Santa Monica Mountains National Recreation Area Land Protection Plan (NPS, March 1998)
- South Coast Missing Linkages Project: A Linkage Design for the Santa Monica Mountains-Sierra Madre Connection (Penrod, K. et. al., 2006)

The Santa Monica-Sierra Madre Connection encompasses habitats between the Santa Monica Mountains National Recreation Area and Los Padres National Forest. The project site is located more than one mile east, and is not essential for the Santa Monica Mountains-Sierra Madre Mountains Connection regional wildlife corridor (Penrod, et. al, 2006). North to south movement in the project vicinity is already eliminated by the urban area of the City of Agoura Hills, and limited in the project vicinity to the Liberty Canyon choke-point. Substantial suitable habitat for movement will continue to exist within undeveloped lands in the surrounding areas, including those adjacent to the southern boundary of the property.

The potential of the project site to wildlife movement was also evaluated both in the field and by reviewing recent aerial photographs of the site and surrounding area. Although diverse wildlife species could potentially move through the project site as it contains vegetative cover and suitable habitat for many species, the site is not of particular importance to wildlife for movement. For example, the site is not situated in a bottleneck or habitat between larger areas of core suitable habitat; it does not contain an important riparian corridor or wildlife crossing; and it is not necessary for wildlife to pass through the site to access essential resources for water, foraging, breeding, or cover. The project site is situated at the edge of urban development



and therefore would not fragment existing natural habitats. Also, development of the project would not impede wildlife movement through the area, given the amount of intact habitat that would remain as open space area near the site. Substantial suitable lands for movement will continue to exist in protected lands of the Santa Monica Mountains, adjacent to the southern boundary of the project site.

### Indirect Impacts

Indirect impacts to wildlife movement could occur from increased noise and lighting. The project site is currently undeveloped; however, noise is audible on-site from traffic on nearby roadways including Agoura Road and the US-101 freeway. The proposed project would add noise and lighting. Wildlife species that currently use the site and would move to nearby areas once the site is developed are likely adapted to the level of noise at the site from surrounding uses. Those that are not adapted to traffic noise are likely in areas further from Agoura Road and would not be affected by the proposed project. Impacts to wildlife due to increased noise during the operational period would be less than significant. Exterior night lighting could disrupt normal behavior and breeding for some wildlife species, and cause some species to avoid the residual natural habitats remaining onsite or directly adjacent to the site. This would potentially increase the extent of impacts on the adjacent habitats and would contribute to a potentially significant impact on general habitat availability. Impacts would be less than significant with implementation of a mitigation measure regulating lighting.

Project-specific and cumulative direct and indirect impacts to wildlife movement would be **less than significant with Mitigation Measure CS-BIO-8** listed at the end of this section.

e) The City's General Plan provides the framework for evaluating potential biological impacts with respect to local concerns. The General Plan Natural Resources Element includes policies to protect biological resources. The City of Agoura Hills Oak Tree Preservation Guidelines provides for protection and replacement of oak trees that are disturbed or removed by development. This code requires the preservation of oak trees and scrub oaks (genus *Quercus*) in recognition of their historical, aesthetic, and environmental value to the citizens of Agoura Hills. The policy applies to the removal, cutting, pruning, or encroachment into the root protection zone of an oak species. To qualify, oak trees must have a trunk diameter greater than two inches at 3.5 feet above grade.

According to the June 29, 2015 memo provided by Ann Burroughs for Kay Greeley, former Landscape and Oak Tree Consultant for the City of Agoura Hills, there are a total of 50 coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobate*) trees on the project site, a number of which are mature specimens. There are six oak trees on the adjacent property to the north and six on the adjacent property to the west near the project site. Two of the onsite and one of the offsite oak trees are dead. Therefore, a total of 59 oak trees protected under the City's Oak Tree Preservation Guidelines are on the project site. The project site also contains 61,845 square feet of scrub oak habitat (*Quercus berberidifolia*).

Construction of the proposed project would impact 35 of the 59 living coast live oak and valley oak trees and some of the scrub oak habitat. Eight coast live oak trees, 21 valley oak trees (Oak Trees 6 through 16, 20, 27 through 29, 31, 32, 37 through 46, 48, 61, and 267), and 21,271 square feet of scrub oak habitat would be removed. In addition, six oak trees would experience



construction encroachment within their protected zones but are expected to survive. Twenty-four of the existing oak trees and 40,574 square feet of scrub oak habitat would be retained with no direct construction impacts. Therefore, the proposed development would result in impacts to 35 percent of the oak tree canopy resource on and off the project site. Table 8 summarizes the existing conditions and potential impacts to protected trees.

**Table 8  
Overall Tree Disposition**

<b>Species</b>	<b>Quantity Present</b>	<b>Quantity Removed</b>	<b>Quantity Saved in Place</b>
Coast Live Oak ( <i>Quercus agrifolia</i> )	25	8	17
Valley Oak ( <i>Quercus lobata</i> )	34	21	13
<b>TOTAL</b>	<b>59</b>	<b>29</b>	<b>30</b>

Source: Ann Burroughs, 2015

Mitigation measures CS-BIO-9 and CS-BIO-10, adapted from the AVSP FEIR, would be required to reduce impacts to protected oak trees. Impacts from conflicts local policies or ordinances, including tree protection, would be **less than significant with mitigation** involving oak tree protection replacement and preservation.

f) The project site is not subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan (General Plan 2035 FEIR, 2010). **No impact** would occur.

**BIOLOGICAL RESOURCES MITIGATION MEASURES**

Project- specific and cumulative direct and indirect special-status species impacts would be **less than significant** with implementation of mitigation measures CS-BIO-1 through CS-BIO-10, adapted from the AVSP FEIR. No additional mitigation measures are required.

**CS-BIO-1 Listed Plant Survey and Protection Plan.** To avoid or minimize potentially adverse impacts on rare plants, the applicant shall offset the loss of individual Lyon's pentachaeta and Agoura Hills dudleya plants through onsite restoration (salvage and replanting), offsite preservation, offsite enhancement, or another method approved by the City of Agoura Hills Planning Director, in consultation with CDFW and USFWS. Prior to issuance of a grading permit surveys for listed plant specifically Agoura Hills dudleya, and Lyon's pentachaeta, shall be performed by a qualified plant ecologist. These surveys shall be performed during the blooming period (April - June), and shall be valid for not more than two years. If a species is found, avoidance shall be required unless the applicant provides substantial documentation that avoidance would not be feasible or would compromise the objectives of the Specific Plan. For Lyon's pentachaeta and Agoura Hills dudleya, avoidance is defined as a minimum 200-foot setback unless an active maintenance plan is implemented for the known occurrence. With implementation of an active maintenance and management program, the buffer width may be reduced further



based on review by USFWS and/or CDFW. If avoidance is not feasible, onsite mitigation is preferred if suitable habitat is present that can be isolated from human disturbance.

If avoidance is not feasible, a restoration plan shall be prepared by a qualified plant ecologist that identifies the number of plants to be replanted and the methods that will be used to preserve this species in this location. The plan shall also include a monitoring program so that the success of the effort can be measured. If offsite mitigation is proposed, the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. Restoration efforts shall be coordinated with applicable federal, state, and local agencies. The required level of success for Agoura Hills dudleya and Lyon's pentachaeta shall be defined at a minimum as a demonstration of three consecutive years of growth of a population equal to or greater than that which would be lost due to the project. The success criteria may be adjusted based on the recommendations of qualified plant ecologist, as approved by the Planning Director in consultation with USFWS and/or CDFW for state and federally listed plants. This level of success shall be determined prior to removal of the impacted population. The restoration plan shall be implemented prior to completion of the project.

Salvage and relocation activities shall include seed and/or topsoil collection, germination of seed by a qualified horticulturist in a nursery setting, transplanting seedlings, and hand broadcasting seed into the appropriate habitats. Seed salvage shall only be used as a last resort and shall only be used as a means to protect the genetic record in a herbarium for the onsite population that would be directly removed.

The restoration plan shall be submitted to the City of Agoura Hills for approval prior to issuance of a grading permit. If a restoration plan is approved, annual monitoring and reporting for at least five years shall also be required to ensure no-net-loss of acres of habitat for these species. [Adapted from mitigation measure BIO-1(a) of the AVSP FEIR.]

**CS-BIO-2 Fuel Modification Zone.** Prior to fuel modification activities in habitat known to contain the State and federally Endangered Lyon's pentachaeta, the federally-listed, Threatened Agoura Hills dudleya, or the Sensitive Ojai Navarretia, a qualified biologist shall locate and flag Agoura Hills dudleya Lyon's pentachaeta, and Ojai Navarretia within the fuel modification zone, and shall demarcate an appropriate buffer(s) of at least 10 feet and develop/implement protocols in consultation with the Los Angeles County Fire Department that would protect the species from direct or inadvertent harm during fuel modification activities, while meeting fire protection requirements. The qualified biologist shall monitor all fuel modification activities in these areas. Upon completion of each fuel modification effort, the biological monitor shall remove flagging used to demarcate the locations of the plants.

**CS-BIO-3 Ojai Navarretia Mitigation/Restoration Plan.** The applicant shall offset the loss of individual Ojai navarretia plants (approximately 74 within the limits of grading, seven within the limits of landscaping, and 163 within the limits of fuel



modification) at a 2:1 ratio by onsite restoration (salvage and replanting), offsite preservation, offsite enhancement, or another method approved by the City of Agoura Hills Planning Director. A Mitigation/Restoration Plan (Plan) shall be submitted to the City of Agoura Hills and CDFW that identifies the location and methodology for satisfying the required offset ratio. Onsite restoration is preferred, with offsite preservation permitted only if the applicant demonstrates that onsite preservation is either not feasible or not as likely to be successful.

*Onsite Restoration (Salvage and Replanting).* Onsite restoration would involve the collection of seed from inside the development footprint (grading enveloped and fuel modification zone) and replanting the seed in a suitable area outside the development footprint. If the applicant proposes to undertake onsite restoration, the Plan, prepared by a qualified plant ecologist, shall detail the approach and timing associated with seed salvage, propagation, planting, irrigation, maintenance, coverage requirements, monitoring requirements, and contingency planning to achieve the performance standard of a 2:1 replacement. The Plan shall identify several on-site locations for replanting (in the event that one area doesn't achieve specified success criteria work). The applicant shall maintain and monitor the plants for a minimum of five years. Prior to issuance of the grading permit, the applicant shall obtain approval for the Plan from the City of Agoura Hills, and secure a bond for an amount equal to the cost of the restoration effort. The bond shall be released by the City upon satisfaction of the approved performance criteria.

*Offsite Preservation.* Offsite preservation would consist of locating a population of Ojai Navarretia containing at least two times the number of individuals and a seed bank by the project and preserving the population in perpetuity via placement of a conservation easement or purchase of the land and dedication to the City or an approved conservation organization. The preserved population should be located on an area of sufficient size to create a preserve core and be located at least 350 feet away from existing or proposed development, paved roads, v-ditches, and irrigated areas. Additionally, the preserve population should exhibit connectivity to other protected open space or hillside areas (preferably, a minimum of 25 percent of the preserved habitat should connect directly to natural habitat areas). If the applicant proposes to mitigate via offsite preservation of the species, the Plan shall include a Preservation Plan that identifies the number of individual preserved, ownership of the land, parties involved, and the preservation methodology (e.g., conservation easement or dedication to an approved conservation organization). The applicant shall implement the approved offsite preservation and monitor the population for a minimum of five years. Under the preservation approach, the applicant shall obtain approval for the Preservation Plan from the City of Agoura Hills and shall complete the transaction, prior to issuance of the grading permit.

*Offsite Enhancement.* Offsite enhancement would consist of locating disturbed poor quality population of Ojai navarretia containing at least two times the number of individuals and occupied habitat impacted by the project and enhancing the conditions of the habitat to prevent further disturbance and/or promote the long-term viability of the population. The applicant shall submit an Enhancement Plan, prepared by a qualified ecologist, which identifies the location of the population and



the need for enhancement, as well as the enhancement methodology that details the approach and timing associated with enhancement, maintenance, monitoring requirements, and contingency planning in order to achieve the 2:1 offset ratio performance standard. The applicant shall implement the approved enhancement plan and monitor the enhanced population for a minimum of five years. If the population proposed for enhancement were to be located on land owned by a public agency, or a conservation organization approved by the City of Agoura Hills, the applicant may enter into an in-lieu fee agreement with the conservation organization to implement and monitor the approved Enhancement Plan. Prior to issuance of the grading permit, the applicant shall obtain approval for the Enhancement Plan from the City of Agoura Hills, and secure a bond for an amount equal to the cost of the enhancement effort. The bond shall be released by the City upon satisfaction of the approved performance criteria. If the Enhancement Plan is to be accomplished via an in-lieu fee agreement, the agreement must be executed and fees conveyed prior to issuance of the grading permit. The performance bond shall not be required if the mitigation is accomplished via an in-lieu fee agreement.

**CS-BIO-4 Special-Status Wildlife Survey.** Beginning no more than two weeks prior and ending no more than three days prior to ground disturbing construction at the project site, three pre-construction surveys for special status species, including (but not limited to) the coast horned lizard, coast patch-nosed snake, burrowing owl, San Diego desert woodrat, San Diego black-tailed hare, and roosting special-status bats shall be conducted by a qualified biologist and submitted to the City Planning and Community Development Department. The pre-construction surveys shall incorporate appropriate methods and timing to detect the special-status wildlife species that could occur at the site. If a special-status species is found, avoidance is the preferred mitigation option. If avoidance is not feasible, the species shall be captured, when possible, and transferred to adjacent appropriate habitat in the open space areas either onsite or directly adjacent to the project site. This shall be performed only by a qualified, approved biologist. The CDFW and City Planning and Community Development Department shall be formally notified and consulted regarding the presence of any sensitive species onsite. If a federally listed species is found prior to grading of the site, the USFWS shall also be notified and appropriate “take” permits acquired prior to any relocation activity [Adapted from mitigation measure BIO-1(b) from the AVSP FEIR].

**CS-BIO-5 Bird Nesting Surveys.** If vegetation clearing (including tree pruning and removal) or other project construction is to be initiated during the bird breeding season (February 1 through August 31), pre-construction/grading surveys shall be conducted by a qualified ornithologist to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the construction zone or within 500 feet of the construction zone. Surveys shall begin 30 days prior to initial disturbance activities and shall continue weekly, with the last survey being conducted no more than three days prior to the initiation of clearance/ construction work. If active nests are found in the survey area, construction activities shall stop until consultation with the City, CDFW, and





USFWS (when applicable) is conducted and an appropriate setback can be established commensurate with the species involved (25 feet for urban-adapted species such as Anna’s hummingbird and California towhee and up to 500 feet for certain raptors). A temporary construction fence barrier shall be erected around the buffer and clearing and construction inside the fenced area shall be postponed or halted, at the discretion of a biological monitor, 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. The applicant shall record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds.

Limits of construction to avoid a nest shall be established in the field with flagging and stakes or construction fencing. Construction personnel should be instructed on the sensitivity of the area. The applicant shall record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds [Adapted from mitigation measure BIO-1(c) from the AVSP FEIR].

**CS-BIO-6 Native Grassland Restoration Plan.** If avoidance of sensitive communities is not feasible, onsite mitigation is preferred if suitable habitat is present that can be isolated from human disturbance. In this event, a restoration plan shall be prepared by a qualified plant ecologist that identifies the location and acreage to be replanted and the methods that will be used to preserve this community in that location. The plan shall also include a monitoring program so that the success of the effort can be measured. The required level of success, at a minimum, shall be defined as a demonstration of three consecutive years of at least 50 percent native grass dominance within the mitigation area. If off-site mitigation is proposed, the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. Restoration efforts shall be coordinated with applicable federal, state, and local agencies. The restoration plan shall be submitted for review as part of the application process with the City Planning Department. In addition, final plans shall be subject to review and approval by the City Planning Director. The Grassland Restoration Plan shall include, but not be limited to, the following components:

The applicant shall submit a Native Grassland Restoration Plan for review and approval by the City Planning and Community Development Department, the Los Angeles County Fire Department, and as necessary, a qualified biologist or landscape specialist. Native Grassland habitat shall be replaced at a minimum ratio of three to one for native grassland lost and shall utilize native species from onsite habitats. Target sites for mitigation plots shall be sampled for soil type and habitat criteria sufficient for the establishment and growth of the native grassland lost. No species identified as invasive (e.g., CNPS, Channel Islands Chapter Invasive Plants List, IPC lists) shall be utilized in the landscape plans. The plan shall include, but not be limited to, the following components:

- Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts)



- Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently)
- Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken)
- Irrigation method/schedule (i.e., how much water is needed, where, and for how long)
- Plant species, seed mixes, weed suppression and planting methodology  
[Adapted from mitigation measure BIO-2(b) of the AVSP FEIR]

From preliminary observations, it appears that potential target areas to perform mitigation for the loss of native grassland exist on the northern slopes of Ladyface Mountain, in the open space of Zone G in the southwest corner of the AVSP boundary. These areas need testing to confirm that they meet the soil and habitat requirements for native grassland species. If sufficient mitigation area does not exist onsite, offsite mitigation or in lieu fees to an offsite local or regional mitigation bank shall be done.

**CS-BIO-7 Bushy Spikemoss- California Buckwheat Scrub/High-Value Coastal Sage Scrub Restoration Plan.** The acreage of Bushy Spikemoss- California Buckwheat Association that is disturbed by fuel modification shall be enhanced at a 2:1 ratio in area(s) to be preserved as permanent open space. To the extent possible, this shall be accomplished by onsite enhancement of disturbed in-kind habitat. If onsite enhancement is not possible, compensation for disturbance to the high-value Bushy Spikemoss - California Buckwheat Association may be accomplished by off-site enhancement of in-kind habitat, preservation of intact habitat equivalent at a 2:1 ratio, or by a contribution to a CDFW approved in-lieu fee program approved by the City Planning Director.

A Mitigation and Monitoring Plan shall be developed by a qualified biologist, restoration ecologist or resource specialist, and approved by the Director of Planning prior to issuance of the grading permit for the project. In broad terms, at a minimum the plan shall include:

- Description of the project/impact and mitigation sites
- Specific objectives
- Success criteria
- Plant palette
- Implementation plan
- Maintenance activities
- Monitoring plan
- Contingency measures

Success criteria shall, at a minimum, be based on appropriate survival rates and percent cover of planted native species and control of invasive plant species in the mitigation area. Monitoring shall be initiated prior to development of the project, and shall be implemented over a five-year period (or longer, if success criteria are not met). The mitigation project shall incorporate an iterative process of annual



monitoring and evaluation of progress, and allow for adjustments to the mitigation project, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the mitigation project shall be submitted to the City Planning Department and the CDFW. Five years after the project start, a final report shall be submitted to the City Planning Department and the CDFW, which shall at a minimum discuss the implementation, monitoring, and management of the mitigation project over the five-year period, and indicate whether the mitigation project has, in part, or in whole, been successful based on established success criteria. The mitigation project shall be extended if success criteria have not been met at the end of the five-year period to the satisfaction of the City Planning Director [Adapted from mitigation measure BIO-2(b) of the AVSP FEIR].

**CS-BIO-8 Lighting Requirements.** The project shall incorporate lighting design features to the extent possible that will reduce the amount and intensity of night lighting in open space areas adjacent to the development. This would involve using lighting only to the extent necessary, using low intensity lights, placing lighting close to the ground when possible, using shields to reduce glare and direct lighting downward, and pointing lights away from open space areas. Security lighting from the site should not exceed 1 foot-candle at the edge of the fuel modification zone [Adapted from mitigation measure BIO-4(f) from the AVSP FEIR].

**CS-BIO-9 Oak Tree Replacement.** Oak tree replacement mitigation for impacts to the sensitive Valley Oak Woodland Alliance shall consist of the protection of oak trees during construction and replacement of oak trees removed for development pursuant to the City of Agoura Hills' oak tree protection ordinance. Every attempt shall be made to mitigate the loss of oak habitat on-site. Four (4) oak trees shall be planted to replace each tree that is approved for removal as follows, per the City Oak Tree Protection Ordinance:

- a) two (2) 24-inch box specimens;
- b) one (1) 36-inch or sixty-inch-box as follows: In the case of landmark trees, (trees whose diameter exceeds 48 inches), the applicant shall obtain a nursery-grown oak tree of equivalent caliper to the tree removed or provide two (2) container grown, 60-inch box trees for each healthy landmark tree approved for removal; and,
- c) one (1) 15-gallon size oak tree.

For impacts involving 10 percent or less of oak tree removal, resulting from grading and project development, each oak tree shall be replaced with specimen oak trees of the same species as the tree that was removed at a ratio and dimension specified in the City's Zoning Ordinance. This mitigation is to occur onsite. For impacts involving greater than 10 percent removal resulting from grading and project development, mitigation shall either be onsite with requirements as listed above, or an in-lieu fee may be paid to the City to be used to acquire land and/or install oak trees on another site, preferably in as close proximity to the area of removal as possible. The sum of the calipers of all oak trees planted must be at least equal to that removed. The locations of the replanted trees shall be indicated on the project plans



submitted to the City for review by the City's oak tree consultant. Trees shall be planted so that mature trees will have a continuous canopy. Every attempt shall be made to plan oak trees according to species-specific habitat requirements: valley oaks at lower elevations in alluvial soils; and coast live oaks in mesic north-facing slop locations. Each oak tree removed by grading and project development shall be replaced with two 36-inch box and two 24-inch box specimen oak trees of the same species as the tree that was removed. Additionally, all naturally occurring native vegetation in the areas proposed for oak tree mitigation shall be identified. This includes surveys for ephemeral plants and bulbs/Oak tree planning, shall not cause the removal or destruction of existing native vegetation without replacement in the same locations.

The City may consider the payment of an in-lieu fee, in an amount determined by the City per ISA standards, to mitigate for the loss of oak trees if the City determines there is insufficient space available on-site for oak tree replacement. The in-lieu fee may be paid to the City to be used to acquire land and/or install oak trees on another site, preferably in as close proximity to the area of removal as possible. The locations of the replanted oak trees shall be indicated on the project plans for review by the City Oak Tree Consultant and approval by the Planning Director. The oaks trees shall be planted in an area to be preserved as permanent open space. Trees planted for mitigation shall be clustered and planted at an appropriate site such that the trees planted will provide natural habitat and replace the oak woodland habitat removed by the project. Oak trees shall be planted according to species-specific habitat requirements: valley oaks at lower elevations in alluvial soils and cost live oaks on mesic north-facing slope locations. Additionally, all naturally occurring native vegetation in the areas proposed for oak tree mitigation shall be identified. This includes surveys for ephemeral plants and bulbs. Oak tree planting shall not cause the removal or destruction of existing native vegetation without the replacement in the same locations.

To mitigate the removal of 21,271 square feet of scrub oak habitat, the land plan shall include at least 213 five-gallon scrub oak trees planted at ten feet on-center. Should the Planning Director and the City Oak Tree Consultant determine that the required number of oak trees cannot be planted on the subject site in a practical fashion, equivalent alternative mitigation shall be established through the establishment of an equivalent in-lieu fee which the applicant shall pay into the City Oak Tree Mitigation Fund for the deficit. The amount of the in-lieu fee for the scrub oaks shall be based on the cost of the purchase, installation and maintenance for a period of three years of one (1) 24-inch box size coast live oak tree for every five remaining scrub oaks to the planted." [Adapted from mitigation measures BIO-3(c) and BIO-3(d) of the AVSP FEIR].

**CS-BIO-10 Oak Tree Preservation Program.** To mitigate impacts to Valley Oak Woodlands and comply with the City of Agoura Hills Oak Tree Preservation Guidelines, the applicant shall submit the results of an oak tree survey and an Oak Tree Report, including an Oak Tree Preservation Program, for review and approval by the City Planning and Community Development Department oak tree consultant prior to issuance of a grading permit. The project shall be developed and operated in



compliance with the approved Oak Tree Preservation Program and any other conditions determined to be necessary by the City oak tree consultant. The program shall include but not be limited to the following components:

- No grading or development shall occur within five feet from the driplines of oak trees that occur in the construction area.
- All specimen oak trees within 25 feet of proposed ground disturbances shall be temporarily fenced with chain-link or other material satisfactory to the City for the duration of all grading and construction activities. The fencing shall be installed six feet outside the dripline of each specimen oak tree, and shall be staked every six feet.
- No construction equipment shall be parked, stored or operated within six feet of any specimen oak tree dripline.
- No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of a specimen oak tree. Pervious paving and other materials are allowed, as approved by the City.
- No artificial surface, pervious or impervious, shall be placed within six feet of the dripline of any specimen oak tree, except for project access roads.
- Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a City approved arborist/oak tree consultant.
- Any trenching required within the dripline or sensitive root zone of any specimen tree shall be done by hand. In addition, trenching the protected zone needs to preserve roots over one inch in diameter by tunneling.
- No permanent irrigation shall occur within the dripline of any existing oak tree.
- Any construction activity required within three feet of a specimen oak tree's dripline shall be done with hand tools.
- A certified arborist shall perform all pruning cuts according to the international Society of Arborists' *Best Management Practices: Tree Pruning* and according to American National Standards Institute (ANSI) A300 pruning standard. Work shall be performed in accordance with the ANZI ZI33.1 safety standard.
- Watering should not occur during the months of June, July, and August unless the root system has been compromised by damage to some of the roots. If recommended by an arborist, water should be applied no more than once or twice a week and allowed to drain thoroughly before more water is applied.
- Fertilization of these native oak trees is not ordinarily recommended and should not be done unless approved by the City Oak Tree Consultant and Planning Director.
- Prior to construction, the vigor of the saved trees shall be assessed. Any trees in a weakened condition shall be treated to invigorate them, as deemed necessary by the City arborist.
- During all phases of construction, the health of the trees shall be monitored for signs of disease. If determined to exist, problems shall be addressed to remedy them.
- Exploratory trenching shall be done by hand or with great care by digging equipment under the observation of the consulting arborist for all trees



proposed to be encroached by this project. This shall be done in order to minimize the damage to the root system by digging and to allow the proper pruning of the roots that are found. If any roots two inches or larger are encountered, they shall be saved (except in a grading cut situation) and covered with a layer of plastic cloth until backfilled.

- Grade stakes should not be nailed to trees. Nothing that causes damages to the tree shall be attached to the trees.
- No planting, irrigation, or utilities should be installed within 15 feet of any native oak tree unless approved by the Planning Director.
- Chemicals or herbicides should not be applied within 100 feet of the dripline of any native oak tree.
- Dust accumulation onto the tree’s foliage from construction shall be hosed off periodically during construction, under the recommendation of the consulting arborist.
- Copies of the oak tree report, oak trees permit, and City-approved site plan and irrigation plan shall be kept onsite for reference during construction.
- A certification letter should be submitted to the City Planning Department within five working days of project completion. [Adapted from mitigation measures BIO-3(a) and BIO-3(b) of the AVSP FEIR].

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**V. CULTURAL RESOURCES**

-- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion**

Section 4.6, *Historic and Archeological Resources*, of the AVSP FEIR discusses impacts to cultural and historic resources. The AVSP FEIR found that new development in the AVSP area has the potential to cause substantial change to identified cultural resources in the area and could



expose previously undiscovered cultural resources and mitigation measures HA-1(a) through HA-1(c) were required.

### Regional History

Prior to the arrival of the Spanish in the sixteenth century, the Native American group known as the Chumash occupied the region. The Chumash included a large and diverse population living in contiguous, autonomous settlements along the California coast, from Malibu Creek in the southeast to Estero Bay in the north. Settlements were also located on the islands of San Miguel, Santa Rosa, and Santa Cruz, and as far as inland as Tejon Pass, Lake Casitas, and the Cuyama River (AVSP FEIR, 2006).

The Chumash developed a complex/stratified social structure by the time the Spanish arrived. Chumash villages were relatively large, some with as many as one thousand people, although one or two hundred inhabitants were more typical. Interior villages may have contained populations varying from 15 to 250 people, much smaller than the coastal villages with 1,000 inhabitants (Greenwood, Romani and Foster 1986).

Abundant and easily accessible food and mineral resources contributed to the social and economic development of the region during prehistoric times. The available resource base for native inhabitants of the area would have provided a diverse range of food and material resources, as well as an advantageous location for trade with nearby native groups.

From the first explorations of Europeans, the early voyages of Juan Rodrigues Cabrillo (1542) and Sebastian Vizcaino (1602), to the land expeditions of Portola (1769) and Anza (1773-1775/1776), few changes took place along the coast between Ventura and Malibu. The result was that the Native American populations still had little interaction with Europeans until the Missions were established in the 1770s. The first recorded European contact with the Hokan-speaking Venturenos Chumash was by Juan Rodriguez Cabrillo in 1542, when he landed near the present city of Ventura. In 1769, Gaspar de Portola traveled down the Santa Clara River, and arrived at the Chumash village of *Shisholop* near Mission San Buenaventura. Portola was followed in 1776 by Juan Bautista de Anza, who camped near Mission San Buenaventura in 1774.

Spanish occupation was punctuated by the establishment of 21 missions along the California coast between 1769 and 1823. The missions were established roughly a day's ride from one another along the Camino Real, which connected San Diego with Solano in the modern state of California. For the most part, Spanish influence was confined to this route, with only a few expeditions reaching deep, interior areas. The Native Americans were slowly assimilated into the mission system through recruitment at which point they were relocated from their villages to help sustain the missions.

Following the secularization of the mission system during the Mexican Period, many enormous land grants were deeded to army veterans and their families. Under the Mexican political system, a majority of the early land grants in the region became ranchos, including El Rio de Santa Clara o La Colonia, Guadaluca, Santa Clara del Norte, San Miguel, Calleguas, Saticoy, Las Posas, Las Virgenes, El Conejo, and Santa Paula. During this time, the land was primarily used for cattle grazing, agricultural development and other ranching activities.



### Project Site Setting

The project site includes an identified prehistoric archeological site, CA-LAN-1352. The site consists of a surface scatter of lithic artifacts and a subsurface deposit at the northern end of the project site. The subsurface deposit in the site boundaries includes a high density of local andesite flakes, cores, stone tools, and large amounts of faunal remains related to food processing or consumption on the site.

The site was originally recorded by City of Agoura Hills archaeologist, Richard L. Wessel, in 1987, when Mr. Wessel conducted a survey of the property and identified a scatter of lithic artifacts and a midden deposit at the northern portion of the property. In 1988, archaeologist Robert J. Wlodarski conducted a Phase II assessment of CA-LAN-1352 that yielded abundant animal bone and numerous stone tools (Wlodarski, 1988). Tentative dating based on obsidian samples and regional site comparisons suggested a Middle Period date (ca. 800 B.C-A.D. 1000). The Phase II study concluded that CA-LAN-1352 was significant under CEQA due to its integrity, potential to yield important scientific data, and its age.

In 2004, Clay Singer conducted a re-evaluation of site CA-LAN-1352 for the Cornerstone project. The investigation consisted of a surface survey that identified 45 lithic artifacts including, eight manos, two metates, two globular mortars, one discoidal, two spherical hammers, eight prepared cores, 18 unmodified flakes, two flake scrapers, one flake reamer, and one projectile point. Based on the results of this survey, Singer concurred with Wlodarski that CA-LAN-1352 represents a significant heritage resource under CEQA. However, Singer also described “severe” bulldozer activity that may have compromised the integrity of a portion of CA-LAN-1352. He also recommended an expanded Phase II investigation of the site and that the results obtained by Wlodarski be incorporated into that study (Singer 2004).

A 2011 report prepared by Compass Rose Archeological, Inc. conducted an expanded Phase II test excavation of the site and added to the subsurface study conducted by Wlodarski, congruent with the recommendations in Singer (2004). The purpose of the Phase II study was to determine if the site retains sufficient integrity to meet the significance criteria to be included in the California Register of Historical Resources (CRHR).

A resource is eligible for listing in the CRHR if it meets any of the criteria for listing, which are as follows:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
2. Is associated with the lives of persons important in our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC §5024.1(c))

The findings of the Phase II report are discussed in section (b-d).





a) The project site is currently vacant, and is not known to have been previously developed, or have any historical built environment resources present. **No impact to historic resources would occur.**

b-d) The following is based on the Expanded Phase II Archaeological Test Excavation at CA-LAN-1352 prepared by Compass Rose in July 2011 and the peer review of this report prepared by Rincon Consultants, Inc. in November 2014, provided as Appendix C of this report.

The Compass Rose study recovered a variety of ecofacts and artifacts such as vertebrate faunal remains, chipped stone tools, and ground stone tools. The study concluded that site CA-LAN-1352 was a seasonal camp occupied for relatively short periods of time to exploit specific natural resources. No human remains were observed or recovered during the subsurface investigations. The study did not find evidence of bulldozer activity identified by Singer (2004) or any other site disturbance other than weed abatement, which would not affect subsurface resources.

Based on the data recovered from the site, the report concluded that CA-LAN-1352 retains integrity and meets the significance requirements for CRHR inclusion under Criterion 4 (it retains the potential to yield important information to the prehistory of the area). The proposed project would involve extensive grading of the site in order to develop seven mixed-use buildings and parking areas. Therefore, impacts are potentially significant. Mitigation would be required in order to address impacts to the site as a result of earth disturbing construction activities.

### **CULTURAL RESOURCES MITIGATION MEASURES**

As discussed above, Phase I and Phase II archeological reports were prepared for the project site. These reports included new mitigation measures to protect the specific resources associated with the project site. Therefore, mitigation measures HA-1(a) through HA-1(c) included in the AVSP FEIR would no longer apply. Implementation of the mitigation measures listed below would reduce impacts to any archaeological resources, paleontological resources, and human remains to a less than significant level.

#### **CS-CR-1 Mitigation Monitoring for Archaeological and Paleontological Resources.**

Monitoring of all project related ground disturbing activities of sediments that appear to be in a primary context shall be conducted by a qualified archaeologist and/or paleontologist [and Native American monitor qualified to identify Chumash and Gabrieleno resources]<sup>6</sup> approved by the City Planning Department. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983). Paleontological monitoring shall be performed by a paleontologist meeting the Society of Vertebrate Paleontology's Paleontological Resource Monitor (SVP 2010). A cross-trained monitor meeting both of these requirements may also be used. Archaeological monitoring is required until excavation is complete or until a soil change to a culturally sterile formation is

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<sup>6</sup> If Native American monitor is required, per a Cultural Resources Report.



achieved, to be determined by the archaeologist. The archaeologist and/or paleontologist may reduce or stop monitoring depending on observed conditions. Paleontological monitoring is required until excavation is complete or until ground disturbance is no longer occurring in the Topanga or Monterey Formations, to be determined by the paleontologist. If archaeological/paleontological resources are encountered during ground-disturbing activities, the City Planning Department shall be notified immediately, and work shall stop within a 100-foot radius until the archaeologist has assessed the nature, extent, and potential significance of any remains pursuant to the California Environmental Quality Act (CEQA). In the event such resources are determined to be significant, appropriate actions are to be determined by the archaeologist consistent with CEQA (PRC Section 21083.2) and the City General Plan, in consultation with the City Planning Department.

**CS-CR-2 Discovery of Human Remains.** In accordance with Health and Safety Code Section 7050.5, PRC Section 5097.98, and the City’s General Plan Policy HR-3.3, in the event of discovery of human remains, the City’s Environmental Analyst and County Coroner shall be notified immediately by the developer, and no further disturbance shall occur until the County Coroner has determined the origin and disposition of the remains, and that no investigation of the cause of death is required. If the human remains are determined to be prehistoric, the County Coroner shall notify the Native American Heritage Commission, which will determine and then notify the Most Likely Descendent (MLD). The MLD shall complete an inspection and make a recommendation within 48 hours of the notification. If no recommendation is received, the remains shall be interred with appropriate dignity on the property in a location not subject to future development.

**CS-CR-3 Phase III Data Recovery.** If avoidance of CA-LAN-1352 is not possible, the project applicant shall complete a Phase III data recovery excavation program prior to project-related ground disturbance. The Phase III data recovery program should be completed by a professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for prehistoric archaeology (qualified archaeologist) and include the preparation of a work plan/research design, fieldwork, laboratory analysis of recovered artifacts and ecofacts, special studies if appropriate, the preparation of a technical report, and curation of recovered materials. The technical report shall include a mitigation monitoring and reporting plan. The Phase III fieldwork shall be conducted by a Native American monitor qualified to identify Chumash and Gabrieleno resources.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS</b>				
-- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

The following information and assessment is based primarily on the soil engineering investigation prepared for the preliminary design of proposed project by Heathcote Geotechnical in January 2014 and the geologic study prepared by Terry A. Mayer, Certified



Engineering Geologist, in January 2014. Addenda to the soil engineering report were also prepared by Heathcote Geotechnical in February 2015 and August 2015. These reports are included in Appendix D. Twelve borings up to 30 feet were performed as part of the soil engineering investigation. No fill soils were encountered. Groundwater was not observed at depths excavated. The historic high groundwater level is 10 feet below the level of Agoura Road.

a.i, a.ii) Impact GEO-1 in Section 4.4, Geology, of the AVSP FEIR determined that groundshaking impacts were significant but mitigable. Mitigation measures GEO-1(a) and GEO-1(b) were required. These mitigation measures have been updated and would continue to apply to the proposed project.

**GEO-1(a) Building Design.** All buildings shall be engineered to withstand the expected design basis ground acceleration that may occur at the project site. All critical facilities shall be designed to withstand the upper bound earthquake ground motion. The design shall take into consideration the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the California Building Code and Chapter 1 of Article 8 of the Agoura Hills Municipal Code. Compliance with these requirements shall be verified by the City Building Official prior to issuance of a Building Permit or Grading Permit.

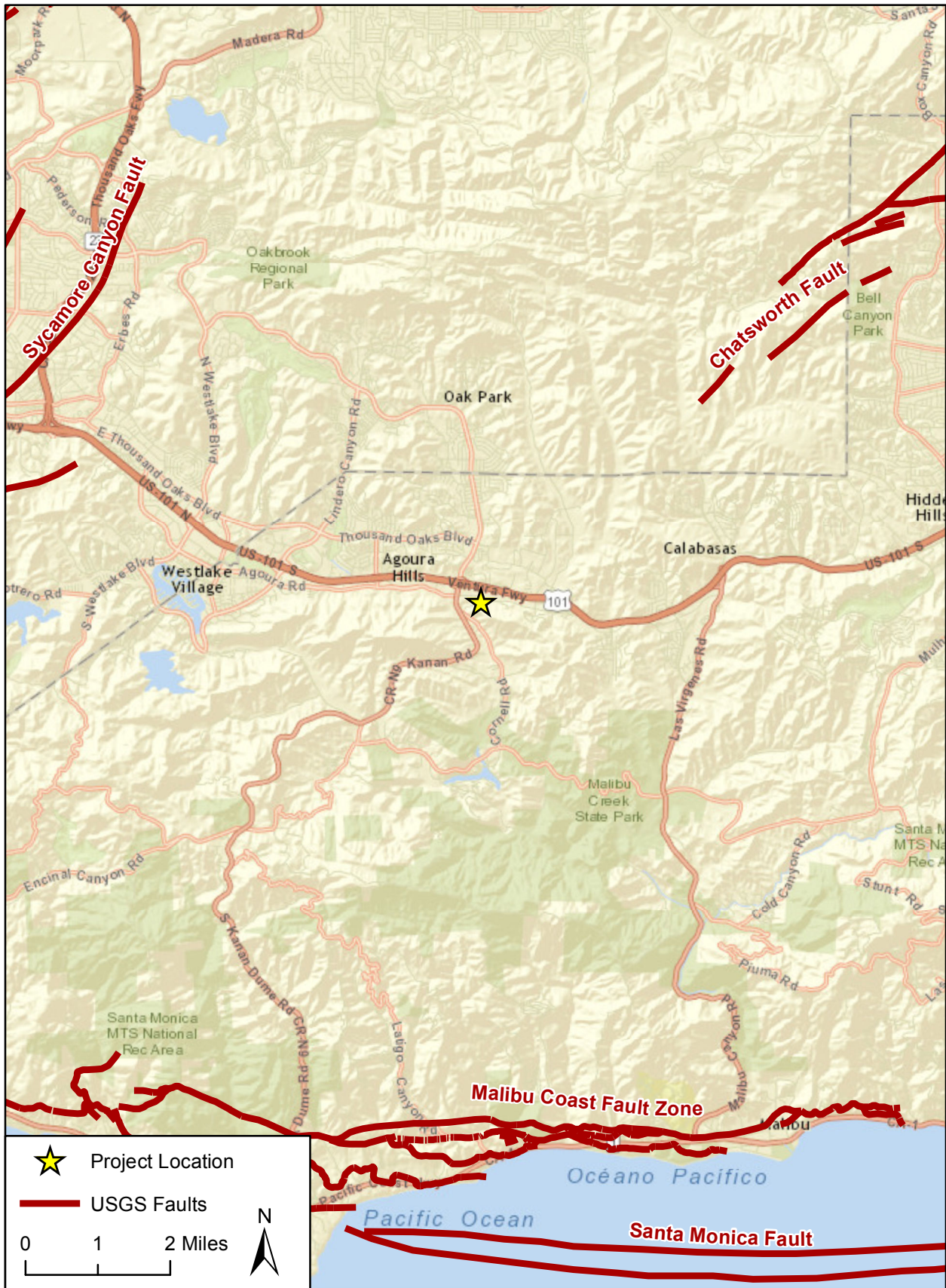
**GEO-1(b) Geotechnical Recommendations.** Future development shall require, and comply with, all recommendations contained in site-specific geologic, geotechnical, and structural design studies prepared for subsequent development activities. Subsequent subsurface investigations shall determine the possible presence of seismically induced hazards and appropriate means of mitigating such hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Building Official and incorporated into final grading and structural design plans, as deemed appropriate by the City Building Official. At a minimum, any buildings considered essential facilities, as defined in the Uniform or California building codes, shall be designed to withstand upper bound earthquake ground motion. All onsite structures shall comply with applicable provisions of the California Building Code. The calculated design base ground motion for the site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available.

Faults in the region of the project site are shown on Figure 5. The project site is not located within an Alquist-Priolo earthquake fault zone as defined by the State Geologist. No known faults underlie project site (Mayer, 2014). The potential for ground rupture is minimal.

As with any site in the southern California region, the project site is susceptible to strong seismic ground shaking in the event of a major earthquake. Nearby active faults include the Sycamore Canyon, Chatsworth, Malibu Coast, Santa Monica, San Andreas, Simi-Santa Rosa, San Cayetano, Big Pine, Red Mountain, and Oak Ridge faults. These faults are capable of producing strong seismic ground shaking at the project site (Mayer, 2014).

Onsite structures would be required to comply with the AHMC Article VIII, Building Regulations, which adopts the California Building Code (CBC, Title 24 of the California Code of





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 Additional data provided by USGS, 2016.

Regional Fault Map

Figure 5

City of Agoura Hills

Regulations). This is consistent with mitigation measure GEO-1 from the AVSP FEIR. With adherence to the AHMC requirements regarding seismic safety, design and construction of the proposed mixed-use buildings would be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for the site would take into consideration the soil type and the most current and applicable seismic attenuation methods available. In addition, project construction would be subject to review and approval by City building and safety officials. With adherence to standard requirements and mitigation measures from the AVSP FEIR listed above, ground shaking impacts would be **less than significant**.

a.iii) Impact GEO-2 in the AVSP FEIR determined that liquefaction impacts are potentially significant and mitigation measure GEO-2 (Liquefaction Studies) was required.

Liquefaction is a condition that occurs when unconsolidated, saturated soils change to a near-liquid state during groundshaking. The potential for liquefaction is defined by several factors including the magnitude and proximity of the earthquake, duration of shaking, soil types, grain size distribution, density, and groundwater level.

In accordance with mitigation measure GEO-2, a soil engineering report was prepared. According to the soil engineering report prepared for the proposed project, due to the volcanic bedrock that underlies the project site and vicinity, the potential of liquefaction during a strong seismic event is considered negligible. Liquefaction impacts would be **less than significant**.

a.iv) The geologic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside all contribute to the potential for slope failure and landslide events. In order to fail, unstable slopes need to be disturbed; common triggering mechanisms of slope failure include undercutting slopes by erosion or grading, saturation of marginally stable slopes by rainfall or irrigation; and shaking of marginally stable slopes during earthquakes.

According to the State of California Seismic Hazard Zone Map for the Thousand Oaks Quadrangle (November 17, 2000), some portions of the project site are susceptible to earthquake-induced landslides. According to the Agoura Hills General Plan 2035 EIR, Figure 4.5-3, "Slope Stability," the project site is in an area with high to moderately high slope stability. The areas with the greatest potential for slope stability problems include, northwest of the Thousand Oaks Boulevard/Kanan Road intersection in the northwest corner of the City, north of Thousand Oaks Boulevard between Kanan Road and Chesebro Canyon Road, which includes a substantial portion of Old Agoura, east of Chesebro Canyon Road, and southwest of the Agoura Road/Liberty Canyon Road intersection (Agoura Hills General Plan 2035 EIR, February 2010). The project site is not within these areas.

According to the geologic report for the proposed project (Mayer, 2014), no landslides were indicated on geologic maps for the project site. In addition, no evidence of landslides was encountered in the exploratory excavations. The topography of land in the area of the building site and in the vicinity of the project site is not indicative of large-scale landsliding (i.e., no offset drainage patterns, no visible landslide scarps, no over-steepened slopes). Therefore, impacts related to seismically-induced landslides would be **less than significant**.



b, c) Impact GEO-3 in the AVSP FEIR found that slope instability could cause geologic hazards onsite. In addition, Impact GEO-4(a) discussed impacts related to blasting of bedrock that underlies the AVSP area and Impact GEO-6 discussed impacts related to onsite soils that may not be suitable for compaction. The following mitigation measures identified in the AVSP FEIR and modified for the proposed project would apply to the proposed project.

**GEO-3(a) Geotechnical Evaluation.** Individual developments shall provide site-specific geotechnical evaluations and geological reports that address onsite soils and slope stability hazards as part of the initial application process. Prior to approval of a specific development plan, these studies shall be submitted to the City Planning Department and/or consultants hired by the City for review and approval as part of the initial application process. These evaluations shall determine the potential for adverse soil stability impacts and shall identify appropriate mitigation techniques. All mitigation recommendations identified in site-specific studies shall be implemented as a condition of future development. Such measures may include avoidance of development in areas found to have unmitigable soil or geologic hazards, soil or grading modifications to ensure acceptable slope stability on manufactured slopes, structural measures to ensure slope stability, drainage control facilities to collect and direct water off of slopes, removal of loose cobbles and boulders from adjacent slopes, and/or other measures deemed appropriate to ensure proper slope stability. If site-specific geologic mitigation measures are found to cause secondary environmental effects not addressed herein (excessive import or export of soil material, retaining walls, blasting, etc.), subsequent environmental analysis may be required.

**GEO-3(b) Erosion Control Plan.** A site-specific erosion control plan that incorporates best management practices shall be prepared by individual applicants and approved by the City prior to the granting of any grading permits for an individual development in the project area. Measures identified in such plans shall be implemented. Such measures may include slope protection measures, netting and sandbagging, landscaping and possibly hydroseeding, temporary drainage control facilities such as retention areas, etc. Landscaping shall be designed by a licensed landscape architect with final landscaping plans to be reviewed and approved by the City Building Official prior to project approval.

**GEO-3(c) City Oversight and Approval.** The City Engineer or equivalent shall inspect a project after the final grading report has been filed. The project shall not be approved for construction by the City Engineer or equivalent until all hazards either caused by project grading or associated with adjoining geologic and soils conditions, such as erosion and slope instability, are mitigated to the City's specifications.

**GEO-4(a) Test Blast/Vibration Study & Blasting Plan.** Blasting shall be discouraged. However, if a site-specific geologic, geotechnical, or structural design study deems blasting necessary for grading and excavation onsite, the applicant must perform a test blast/vibration study to evaluate the variation in vibratory ground motion intensity with respect to distance from the blast site. It must be shown that the blasting can be done safely with respect to existing improvements.



A blasting plan shall be provided as part of the vibration study, and submitted as part of the initial application submittal to the City Planning Department, City Council and Fire Marshall for approval. Blasting permit approval would be subject to the City's discretion and may be denied. If the City were to approve the blasting plan, at a minimum it should be designed to minimize ground shaking away from the blast area. Any areas having unstable slopes or rockfall hazards shall be secured to prevent injury or property damage. If approved, the permittee shall provide sufficient supervisory control as determined by the building official during the grading operation to ensure compliance with approved plans and with the municipal code. When found necessary by the City Building Official, the permittee shall employ a qualified geologist and foundation engineer to assist in supervising the grading operation. If a blasting permit is denied by the City, the applicant shall prepare an alternative application for development which excludes the need for blasting.

**GEO-6(a) Settlement Related Mitigation.** Future development shall comply with all recommendations contained in site-specific geologic, geotechnical, and structural design studies as required to be prepared for subsequent development activities. Subsequent subsurface investigations shall determine the required degree of compaction and the proper moisture content and appropriate means of mitigating settlement related hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Planning Department and City Building Official and incorporated into final grading and structural design plans, as deemed appropriate by the City Building Official prior to issuance of a Grading Permit and/or Building Permit. At a minimum, suitable measures to reduce settlement impacts shall include, but not be limited to:

- Removal of organic material in the area of the proposed grading
- Removal of non-engineered artificial fill in areas to receive engineered fill or in areas where structural support is required.
- Placement of a keyway at the bottom of all fill slopes a minimum depth of 3 feet and down to the bedrock with the keyway a minimum of 10 feet wide (unless otherwise determined by the site-specific geological study)
- Fill soils shall be benched into the hillside
- Removal of upper soils to the bedrock

After excavation:

- All bottoms of the excavations and areas to receive slabs shall be scarified and compacted to 90%
- All fills and backfills should be placed in horizontal layers less than 8 inches in loose thickness
- Soils shall be compacted to a minimum of 90% of the maximum density rendered by the latest ASTM version
- Moisture content should not vary more than 2% from the optimum moisture content, although the grading process will be more easily accomplished with the soils being 1 - 2% wetter than optimum moisture content
- Any utility trenches will need to be properly backfilled as detailed above





- Any import soils should be approved by a qualified geologist
- Slope faces shall be compacted to at least 90% of maximum compaction

**GEO-6(b) Additional Environmental Review.** If individual developers are unable to find a disposal site for construction cut within 12.5 miles of the Specific Plan area, or if processed soil is not suitable for fill, then individual projects may require additional environmental analysis. Individual developers must demonstrate a means for disposal of excess cut materials, within 12.5 miles of the project site, prior to approval by the City.

The proposed project involves development of seven mixed-use buildings on an undeveloped site. Upon completion of the proposed project, the site will be mostly developed and undeveloped areas would include landscaping. There will not be a substantial amount of exposed soil such that there is a low risk for substantial soil erosion. Construction activities have the potential to expose surface soils to wind and water erosion. However, as noted in the Air Quality (Section II) discussion above, the proposed project would have to comply with SCAQMD Rule 403 regarding incorporation of measures to reduce fugitive dust, which would also help reduce the potential for construction related erosion (SCAQMD Rule 403(d)(2)). SCAQMD Rule 403, Table 1, provides measures for construction activities to reduce fugitive dust. This includes measures for the application of water or stabilizing agents to prevent generation of dust plumes, pre-watering materials prior to use, use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover effectively stabilize slopes, hydroseed prior to rain, washing mud and soils from equipment at the conclusion of trenching activities. (See SCAQMD Rule 403, Table 1, for additional details.) Water erosion will be also be prevented during construction activities through the City's standard erosion control practices required pursuant to the California Building Code and the National Pollution Discharge Elimination System (NPDES), such as silt fencing or sandbags. Construction activities would be required to comply with the General Construction Activities Stormwater Permit (GCASP) approved by the State Water Resources Control Board by Water Quality Order 99-08-DWQ and the proposed project would be required to develop a Stormwater Pollution Prevention Plan (SWPPP). These standard requirements and project components would serve to reduce the potential for soil loss on the project site due to erosion. In addition, mitigation measure GEO-3(b) from the AVSP FEIR requires development of an erosion control plan. With adherence to standard requirements and implementation of mitigation measure GEO-3(b) from the AVSP FEIR, impacts would be **less than significant**.

Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is typically associated with regional changes in ground surface elevation associated with withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, or hydrocompaction. The project site is not subject to liquefaction hazards and is not susceptible to subsidence (Heathcote, 2014). Lateral spreading is the horizontal movement or spreading of soil toward an open face. The potential for failure from subsidence and lateral spreading is highest in areas where the groundwater table is high and where relatively soft and recent alluvial deposits exist. Lateral spreading hazards may also be present in areas with liquefaction risks. According to the geologic study prepared for the project, due to the earth materials that underlie the project site, the potential for lateral spreading during a strong seismic event is considered negligible. The



proposed project would not result in on- or off-site spreading, subsidence, liquefaction, or collapse.

Other slope and soil instabilities can be the result of man-made features (undercutting natural slopes, improper construction of cut or fill slopes) or natural features (mudslides, landslides, or rockfalls). The topography across the project site is variable and would require relatively substantial topographic modification. Creation of manufactured slopes could create instability if appropriate engineering practices are not followed. In addition, the proposed project involves retaining walls along the southern boundary of the project site. If not properly engineered, the retaining walls could potentially create slope stability problems and could expose new development to slope failures such as landslides, soil settlement, rock falls, etc. Potential impacts relating to slope stability hazards are therefore considered potentially significant. However, as required by mitigation measure GEO-3(a), all mitigation recommendations identified in site-specific studies shall be implemented as a condition of future development. With implementation of the recommendations included in the 2014 *Soil Engineering Investigation* conducted by Heathcote Geotechnical related to soil engineering as required by mitigation measure GEO-3(a), impacts would be **less than significant**. The recommendations are related to:

- Foundation design (supporting soils, depth and width, allowable bearing value, settlement, lateral values)
- Slabs on grade
- Basement/Retaining Walls (lateral values, drainage)
- Asphaltic paving
- Drains and grades
- Construction procedures (slopes, excavations, standard grading procedure, subdrains)

In addition to mitigation measure GEO-3(a) from the AVSP FEIR, the project must comply with the California Building Code (CBC) requirements related to these areas (Section 1610 for lateral soil loads and Section 1613 for earthquake loads). Compliance with CBC requirements would further ensure impacts associated with lateral spreading, subsidence, and collapse would be **less than significant**.

The project site is underlain by volcanic bedrock which may be difficult to excavate, and blasting may be needed for some portions of the site. Given that the project site involves steep slopes, small landslides or rockfalls are possible should blasting occur. Mitigation measure GEO-4 from the AVSP FEIR is required to reduce blasting-related impacts. With mitigation measure GEO-4, impacts related to landslides would be less than significant. With mitigation measures GEO-6(a) and GEO-6(b) from the AVSP FEIR, impacts related to suitable on-site soils would be **less than significant**.

d) The AVSP FEIR found that impacts related to expansive soils were potentially significant and mitigation measure GEO-5(a) (Foundations and Project Infrastructure Design) and GEO-5(b) (Soils and Foundation Report) were required. As noted above, a geotechnical evaluation and a soil engineering report were prepared for the proposed project.

Expansive soils are generally clays which increase in volume when saturated and shrink when dried. According to the soil engineering report (Heathcote, 2014) expansive soils are present on



the project site at depths of one to two feet. The proposed project involves extensive grading. Approximately 95,000 cubic yards of earth material would be cut and 92,500 cubic yards would be exported offsite. With the removal of this material, the majority of expansive soils near the surface of the project sit would be removed.

Further, CBC Section 1808.6 requires special foundation design for buildings constructed on expansive soils. If the soil is not removed or stabilized, then foundations must be designed to prevent uplift of the supported structure or to resist forces exerted on the foundation due to soil volume changes or shall be isolated from the expansive soil. Compliance with CBC requirements would ensure protection of structures and occupants from impacts related to expansive soils. In addition, mitigation measure GEO-3(a) would reduce impacts related to expansive soils and unstable soils to a **less than significant** level.

e) The City and County provide sanitary sewer service, with the Las Virgenes Municipal Water District providing the major sewer trunk lines, and would continue to provide these services to development in the City (City of Agoura Hills General Plan 2035 EIR, February 2010). The proposed project would connect to existing sewer service, and would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, **no impact** would occur.

**GEOLOGY AND SOILS MITIGATION MEASURES**

Mitigation measures GEO-1(a), GEO-1(b), GEO-3(a), GEO-3(b), GEO-3(c), GEO-4(a), GEO-6(a), and GEO-6(b) identified in the AVSP FEIR and listed above, as modified for the proposed project, would apply to the proposed project. With mitigation, impacts related to geology and soils would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VII. GREENHOUSE GAS EMISSIONS**

-- Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

Climate change is the distinct change in measures of climate for a long period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions all over the world. Natural changes in climate can be caused by indirect processes such as changes in the Earth’s orbit around the Sun or direct changes in the climate system itself (i.e. changes in



ocean circulation). Human activities can affect the atmosphere through emissions of GHGs and changes to the planet's surface. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities, and some agricultural practices.

GHGs differ from other emissions in that they contribute to the “greenhouse effect,” a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60 degrees Fahrenheit (°F). Emissions from human activities since the beginning of the industrial revolution, approximately 250 years ago, are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. GHGs occur naturally and from human activities.

Greenhouse gases produced by human activities include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

Potential global warming impacts in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CNRA, 2009).

### Regulatory Framework

The proposed project would be required to comply with the California Energy Code (Title 24, Cal. Code Reg., Part 6). The nonresidential component of the proposed project would be required to install photosensors and the residential portion of the proposed project would be required to install energy efficient lighting fixtures consistent with the requirements of the 42 U.S.C. § 17001 et seq.

California also implements the Renewable Portfolio Standard (Pub. Utilities Code § 399.11 et seq.). As a result of this requirement, the electricity provider for the project, Southern California Edison, (SCE) currently procures 21.6 percent of its electricity from renewable sources. Pursuant to SBX1 [2011] SCE will be required to provide 33 percent of their electricity with renewable sources by the year 2020.

### CEQA Requirements

The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The city of Agoura Hills is in the jurisdiction of the SCAQMD. The 2008



SCAQMD threshold considers emissions of over 10,000 metric tons carbon dioxide equivalent (CO<sub>2</sub>E) per year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency.

Although not yet adopted, the SCAQMD has a recommended Tier 3 screening level threshold of 3,000 MT/year CO<sub>2</sub>e for mixed-use projects ((SCAQMD, "Proposed Tier 3 Screening Values," September 2010).

### Methodology

Project construction and operation would generate greenhouse gas (GHG) emissions through the burning of fossil fuels, electricity consumption, and other emissions of GHGs, thus potentially contributing to cumulative impacts related to global climate change.

The analysis focuses on CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub> as these are the GHG emissions that development onsite would generate in the largest quantities. Because the development would only involve residential and commercial uses, fluorinated gases such as HFCs, PFCs, and SF<sub>6</sub>, were not included in this analysis. Fluorinated gases are primarily associated with industrial processes and the quantity of fluorinated gases associated with the proposed project would not be significant.

### *Construction Emissions Methodology*

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment on-site and worker, vendor, and export truck trips to and from the project site (see discussion in Section II, *Air Quality*). For this analysis, it was assumed that construction would occur over approximately 24 months. Emissions associated with the construction period were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2, based on the projected maximum amount of equipment that would be used onsite at one time. Air districts such as the SCAQMD (2011) have suggested amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions. Complete CalEEMod results and assumptions can be viewed in Appendix A.

### *Operational Emissions Methodology*

CalEEMod provides operational emissions of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>. Emissions from energy use include emissions from electricity and natural gas use. The emissions factors for natural gas combustion are based on EPA's AP-42, (*Compilation of Air Pollutant Emissions Factors*) and CCAR. Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CalEEMod User Guide, 2013). Southern California Edison (SCE) is the electricity provider the project site and as of 2013 procures 21.6 percent of its electricity from renewable sources (CPUC, 2014). The default electricity consumption values in CalEEMod include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from the California Air Resources Board (CARB), U.S. EPA, and district supplied emission factor values (CalEEMod User Guide, 2013).



Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, 2013). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

For mobile sources, CO<sub>2</sub> and CH<sub>4</sub> emissions from vehicle trips to and from the project site were quantified using in CalEEMod. Because CalEEMod does not calculate N<sub>2</sub>O emissions from mobile sources, N<sub>2</sub>O emissions were quantified using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (see Appendix A for calculations). The estimate of total daily trips associated with the proposed project was based on the project traffic study and was calculated and extrapolated to derive total annual mileage in CalEEMod. Emission rates for N<sub>2</sub>O emissions were based on the vehicle fleet mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

A limitation of the quantitative analysis of emissions from mobile combustion is that emission models, such as CalEEMod, evaluate aggregate emissions, meaning that all vehicle trips and related emissions assigned to a project are assumed to be new trips and emissions generated by the project itself. Such models do not demonstrate, with respect to a regional air quality impact, what portion of these emissions are actually "new," and specifically attributable to the project in question. For most projects, the main contributor to regional air quality emissions is from motor vehicles, but the quantity of vehicle trips appropriately characterized as "new" is usually uncertain as traffic associated with a project may be relocated trips from other locales. In other words, vehicle trips associated with the project may include trips relocated from other existing locations, as people begin to use the proposed project instead of similar existing retail and commercial uses. Therefore, because the proportion of "new" versus relocated trips is unknown, the VMT estimate generated by CalEEMod is used as a conservative, "worst-case" estimate.

a) GHG emissions associated with short-term construction and long-term operation of the project were estimated using the California Emissions Estimator Model (CalEEMod) (see Appendix A for forecast assumptions and results). Operational emissions include area sources, energy use, solid waste, water use, and transportation emissions.

Impacts related to GHG emissions were not analyzed in the AVSP FEIR.

### Construction Emissions

Based on the CalEEMod results, construction activity for the proposed project would result in an estimated 1,388 metric tons of CO<sub>2</sub>E. Because climate change represents a long-term cumulative impact, emissions associated with construction activity are generally amortized over a 30-year period (the anticipated life of the project) in order to more accurately compare them to the annual threshold. Therefore, the project would result in approximately 46 metric tons of CO<sub>2</sub>E per year.



### *Area Sources*

Area sources of GHG emissions include consumer products, landscape maintenance, and architectural coating. Area sources would result in approximately one metric ton of CO<sub>2</sub>E per year.

### *Energy Use*

Operation of the proposed project would consume both electricity and natural gas. The generation of electricity through combustion of fossil fuels typically yields CO<sub>2</sub>, and to a smaller extent, N<sub>2</sub>O and CH<sub>4</sub>. Electricity consumption associated with the project would generate approximately 546 metric tons CO<sub>2</sub>E per year. Natural gas use would generate approximately 197 metric tons CO<sub>2</sub>E per year (see Table 10). Electricity and natural gas consumption would generate approximately 743 metric tons of CO<sub>2</sub>E per year.

### *Solid Waste*

The proposed project would generate solid waste that would result in approximately 46 metric tons of CO<sub>2</sub>E per year according to the CalEEMod output. It was assumed that the project would achieve at least a 50 percent diversion rate in accordance with AB 939.

### *Water Use*

Based on the amount of electricity needed to supply water to the proposed project, the proposed project would generate approximately 75 metric tons of CO<sub>2</sub>E per year.

### *Transportation*

Mobile source GHG emissions were estimated using total daily trips based on ATE's 2014 report (see Section XVI, *Transportation and Traffic*), and by the total vehicle miles traveled (VMT) estimated in CalEEMod. The proposed project would generate approximately about 4.8 million gross annual VMT. As noted above, CalEEMod does not calculate N<sub>2</sub>O emissions related to mobile sources. As such, N<sub>2</sub>O emissions were calculated based on the project's VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009). The project would generate an estimated 2,303 metric tons of CO<sub>2</sub>E associated with mobile emissions.

### *Combined Construction, Stationary and Mobile Source Emissions*

Table 9 combines the construction, operational (energy use, area source, solid waste, and water use emissions), and mobile GHG emissions associated with the proposed project. The combined annual emissions would total approximately 3,214 metric tons CO<sub>2</sub>E per year.

This emissions estimate indicates that the majority of the project's GHG emissions are associated with vehicular travel (72 percent). This exceeds SCAQMD's recommended screening threshold of 3,000 metric tons CO<sub>2</sub>E per year. Therefore, mitigation measure CS-GHG-1 is required.



**Table 9  
 Combined Annual Emissions of Greenhouse Gases**

Emission Source	Annual Emissions (CO <sub>2</sub> E) (metric tons)
<b>Construction</b>	46
<b>Operational</b>	
Area	1
Energy	743
Solid Waste	46
Water	75
<b>Mobile</b>	
CO <sub>2</sub> and CH <sub>4</sub>	2,195
N <sub>2</sub> O	108
<b>Total</b>	<b>3,214</b>

*Sources: See Table 2.2 "Overall Operational – Mitigated Operational" in Appendix A, CalEEMod annual output.*

As shown in Table 10, with implementation of mitigation measure CS-GHG-1, emissions would be below the 3,000 metric tons CO<sub>2</sub>E per year threshold and impacts would be **less than significant**.

**CS-GHG-1 GHG Reduction Measures.** The applicant shall incorporate the following measures to reduce GHG emissions:

- Exceed adopted Title 24 energy requirements by a minimum of 20 percent (in accordance with mitigation measure AQ-3(a))
- Install high efficiency lighting
- Use built-in energy efficient appliances
- Use water-efficient irrigation systems
- Implement employee trip reduction program to achieve an eight percent reduction in vehicle trips

**Table 10  
 Mitigated Annual Emissions of Greenhouse Gases**

Emission Source	Annual Emissions (CO <sub>2</sub> E) (metric tons)
<b>Construction</b>	46
<b>Operational</b>	
Area	1
Energy	683
Solid Waste	46
Water	73
<b>Mobile</b>	
CO <sub>2</sub> and CH <sub>4</sub>	2,037
N <sub>2</sub> O	100
<b>Total</b>	<b>2,986</b>

*Sources: See Appendix A for CalEEMod annual output.*





b) Senate Bill 375, signed in August 2008, requires the inclusion of sustainable communities' strategies (SCS) in regional transportation plans (RTPs) for the purpose of reducing GHG emissions. In April 2012, the South Coast Association of Government (SCAG) adopted the 2012-2035 *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). SCAG's RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development in order to comply with SB 375. A goal of the SCS is to "promote the development of better places to live and work through measures that encourage more compact development, varied housing options, bike and pedestrian improvements, and efficient transportation infrastructure." The proposed project is proposed directly adjacent to existing commercial uses so the project can easily be served by existing transportation infrastructure. The proposed project is a mixed-use project that would provide compact residential and commercial uses and would include bicycle and pedestrian improvements to nearby roadways. Therefore, it would be consistent with this goal. Another goal of the RTP/SCS is to "create more compact neighborhoods and plac[e] everyday destinations closer to homes and closer to one another." The proposed project would place restaurant, retail, and office uses near residences, thereby meeting this RTP/SCS goal.

Assembly Bill 32, the "California Global Warming Solutions Act of 2006," was signed into law in the fall of 2006. This bill also requires achievement of a statewide GHG emissions limit equivalent to 1990 emissions by 2020 (essentially a 25 percent reduction below 2005 emission levels) and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions.

Executive Order (EO) S-3-05 was issued by the Governor in June 2005. EO S-3-05 sets a GHG emission reduction target of 1990 levels by 2020. Assembly Bill 32, the "California Global Warming Solutions Act of 2006," was signed into law in the fall of 2006. This bill also requires achievement of a statewide GHG emissions limit equivalent to 1990 emissions by 2020 (essentially a 25 percent reduction below 2005 emission levels) and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006, published the *Climate Action Team Report* (CAT Report) (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. The strategies include the reduction of passenger and light duty truck emissions, reduction of energy and water use and increased recycling. Several of these actions area already required by California regulations, including the following:

- AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by a passenger vehicles and light duty trucks.
- In 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
- The Integrated Waste Management Act of 1989 (AB 939, Sher, Chapter 1-95, Statutes of 1989) established a 50 percent waste diversion mandate for California.
- Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings, and additions and alterations to existing buildings).



- California Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 33 percent of retail electricity sales from renewable energy sources by 2020, with certain cost constraints.
- Green Building Executive Order, S-20-04 (20014) set a goal of reducing energy use in public and private buildings by 20 percent by the year 2015 as compared with 2003 levels.

In addition, in 2008 the California Attorney General published *The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level* (Office of the California Attorney General, Global Warming Measures Updated May 21, 2008). This document provides information that may be helpful to local agencies in carrying out their duties under CEQA as they relate to global climate change. Included in this document are various measures that may reduce the global climate change related impacts of a project such as reducing construction and demolition waste, reducing water use, and encouraging smart land use. The proposed project would meet many objectives of the CAT report and Attorney General through compliance with City standards. For example, the City enforces the 2010 California Green Building Standards Code on new development. In addition, curbside recycling and green waste services are provided to residential developments in the City. Based on current diversion rates in Agoura Hills, it is assumed that 58 percent of solid waste produced by residents on the project site would be diverted from landfills. Landscaping with native, drought-tolerant, and low water consuming plants would minimize water use and associated GHG emissions from transporting water to the site. The proposed project would also include water-efficient faucets and toilets. The proposed project implements smart land use practices as it is a mixed-use project and is adjacent to existing commercial development and near alternative transportation. The proposed project would be consistent with applicable CAT strategies and 2008 Attorney General Greenhouse Gas Reduction Measures.

The City of Agoura Hills General Plan (March 2010) identifies goals and policies generally related to reduction of GHG emissions. The project would be consistent with these items, including Policy LU-1.2, Development Locations (allowing for growth on the immediate periphery of existing development in limited areas); Policy LU-4.8, Connectivity (connecting pedestrian and bicycle access to nearby areas); Policy LU-5.1, Sustainable Building Practices (buildings with energy and water reduction features); and Policy LU-5-4, Sustainable Land Development Practices (concentrating uses with mixed-use design).

According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC) (May 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. However, the project is approximately 8 miles from the coastline and is not at risk for inundation from sea level rise (California Energy Commission, “Cal-Adapt website”, 2014).

As noted above, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would be consistent with the objectives of the RTP/SCS, AB 32, SB 97, AB 1493, SB 375, and the City of Agoura Hills General Plan. Impacts would be **less than significant**.



**GREENHOUSE GAS MITIGATION MEASURES**

Mitigation measure CS-GHG-1, listed above, is required to reduce GHG impacts. With this mitigation measure, GHG impacts would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS</b>				
-- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VIII. HAZARDS AND HAZARDOUS MATERIALS**

-- Would the project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Discussion**

Information used in this analysis relies upon a Phase I Environmental Site Assessment (ESA) prepared by Lord Environmental Services in March 2015. This report is available for review at the Agoura Hills City Hall.

a, b) The AVSP FEIR found that impacts related to release of hazardous materials would be less than significant.

The proposed project involves development of a mixed-use project with residential, retail, office, and restaurant uses. Construction of the proposed project would involve the use of minor amounts of hazardous materials, such as fuels, other petroleum products, and solvents associated with the use of heavy machinery at the site. Operation of the proposed project would not involve the routine transport, use or disposal of hazardous substances, other than minor amounts used for maintenance, cleaning, and landscaping characteristic of a residential and commercial development. As such, the project would not have the potential to release substantial quantities of hazardous materials into the environment. Impacts would be **less than significant**.

c) The AVSP FEIR found that impacts related to release of hazardous materials near schools would be less than significant.

The school closest to the project site is the Tutor Time daycare and preschool approximately 0.24 miles north of the project site across Agoura Road. There are also several preschools approximately 0.6 miles east of the project site. As stated above, the proposed project would result in a minor increase in typical household and landscaping chemicals commonly used in residential and commercial uses (including those currently existing in and around the nearest



school), and would not involve the use, generation, storage, or transport of large quantities of hazardous materials, substances, or waste. Therefore, impacts would be **less than significant**.

d) The AVSP FEIR found that the potential presence of hazardous materials on developed properties could affect future users, construction workers, and/or the environment. Mitigation measure HAZ-3 from the AVSP FEIR requires the preparation of a Phase I ESA for

In accordance with this measure, a Phase I ESA was prepared by Lord Environmental Services in March 2015. The Phase I found that the project site has been vacant since as early as 1928. No concrete pad-mounted high voltage transformers, hazardous materials, visible indications of the presence of underground storage tanks, aboveground storage tanks, clarifiers, sumps, wells, pits, or signs of major spills or stains on the project site were observed. The regulatory search of local, state, and federal agencies databases did not indicate a likelihood of soil or groundwater contamination on the project site from onsite or offsite sources.

The project site is not listed on a hazardous materials site list pursuant to Government Code §65962.5 (LES, 2015). In addition, there are no hazardous materials sites within 1,000 feet of the project site. The proposed project has complied with mitigation measure HAZ-3 from the AVSP FEIR and this mitigation measure would no longer apply. The project site is not located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and therefore the proposed project would not create a significant hazard to the public or the environment. Impacts would be **less than significant**.

e, f) There are no airports or airstrips located in the project site vicinity. The closest airport is the Van Nuys Airport, situated about 20 miles east of the project site. The site is not within an area covered by an airport land use plan, nor is it located in the vicinity of a private air strip. Therefore, **no impact** would occur.

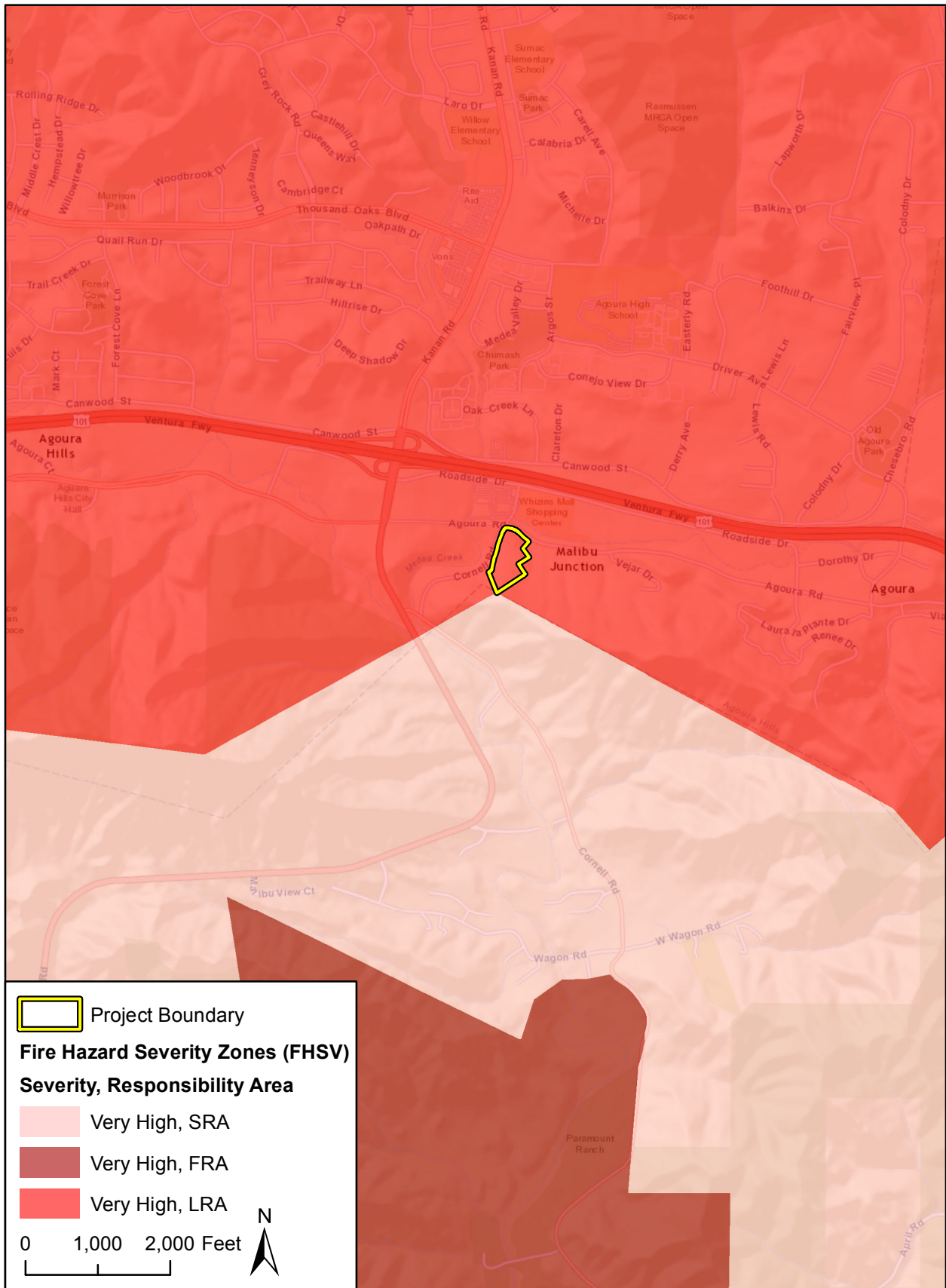
g) The AVSP FEIR found that impacts related to emergency response and evacuation plans would be less than significant.

The proposed project involves development of a site zoned and designated for development. Implementation of the project would not interfere with existing emergency evacuation plans, or emergency response plans in the area. The additional demand for evacuation associated with the proposed project is not expected to impair or interfere with any emergency response or evacuation plans. Moreover, the project would be required to comply with the State Fire Code, City Municipal Code, and Los Angeles County Fire Department (LACFD) standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements. This impact would be **less than significant**.

h) The AVSP FEIR found that the AVSP area is within a wildfire hazard area, but with existing regulations intending to minimize the effects associated with wildfires, impacts would be less than significant.

Figure 6 shows the fire hazard severity zone rating for the project site and surrounding area according to California Department of Forestry and Fire Protection.





Imagery provided by ESRI and its licensors © 2016;  
 Additional data provided by CAL FIRE, 2016.

Fire Hazard Severity Zone Map

Figure 6

The City of Agoura Hills General Plan (March 2010) and Municipal Code classify the City as a “Very High Fire Hazard Severity Zone” (formerly Fire Zone 4). Development of the proposed project could expose people or structures on the project site to wildfire hazards. In addition, the proposed project has the potential to increase the likelihood of wildfires by increasing human activity on the urban/wildland interface. However, the proposed project would be required to comply with standard fire prevention measures and proper site design in accordance with the City’s Municipal Code requirements and Los Angeles County Fire Code. The City of Agoura Hills Uniform Fire Code, found in Section 8200 of the City of Agoura Hills Municipal Code, includes modifications to the California Building Code (CBC) that intend to prevent loss during a wildland fire, including design and installation standards. “Where required by the fire code official, a fuel modification plan, a landscape plan and an irrigation plan prepared by a registered landscape architect, landscape designer, landscape contractor, or an individual with expertise acceptable to the building official shall be submitted ... prior to any new construction” (Agoura Hills Municipal Code Section 704A.6). Therefore, the project applicant would be required to prepare a fuel modification plan and it must be reviewed and approved by the Los Angeles County Fire Department Fuel Modification Unit. With implementation of a fuel modification plan and mandatory compliance with the City’s building standards and County of Los Angeles Fire Department fuel modification regulations, impacts related to wildland fire would be **less than significant**.

**HAZARDS AND HAZARDOUS MATERIALS MITIGATION MEASURES**

A Phase I ESA was prepared for the project site in accordance with mitigation measure HAZ-3 from the AVSP FEIR. Therefore, this mitigation measure would no longer apply. As no other significant impacts would occur, no further mitigation measures are required. Impacts would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

**IX. HYDROLOGY AND WATER QUALITY**

-- Would the project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY</b>				
-- Would the project:				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>





## Discussion

Information used in this analysis relies upon the hydrology report for the project prepared by DTR Engineering in October 2008 and the Conceptual Standard Urban Storm Water Mitigation Plan prepared by Westland Civil, Inc. in February 2014. These reports are available for review at the Agoura Hills City Hall.

a, e, f) As discussed in Impact HYD-1 in the AVSP FEIR, water quality impacts during construction were found to be less than significant. The AVSP FEIR also found that impacts related to pollution in surface runoff would be less than significant (Impact HYD-4). However, impacts related to the increase in peak stormwater flows were found to be significant but mitigable (Impact HYD-2) and mitigation measure HYD-2 was required:

**HYD-2 Final Drainage Plans.** Individual project applicants shall be required to prepare and submit a final drainage plan, prior to issuance of a grading permit, to the City's Planning and Community Development Department and Los Angeles County Flood Control for approval. Plans shall include detailed design and hydraulic analysis of the drainage facilities that capture and convey on- and off-site runoff. Each developer shall be required to evaluate the extent of potential flood hazards present utilizing the Modified Rational Method (or the latest model approved by Los Angeles County Flood Control) and to implement mitigation measures required to reduce such impacts to a level of insignificance. The drainage plan for each project shall include post development designs for runoff detention and on site infiltration to reduce 50-year frequency storm peak discharge to the pre development level. These drainage facilities shall meet the design requirements and capacities of the *Master Plan of Drainage for the City of Agoura Hills, The Los Angeles County Department of Public Works Hydrology Manual and the Hydrology and Sedimentation Appendix*, or other revised hydraulic analyses as determined by the City Engineer, and shall not increase the base flood elevation above or below the project site. Additionally, mitigation shall meet all interim peak flow standards, or the most up to date standards, as established by the LACDPW. The plans shall be subject to review and approval by the City Engineer.

DTR Engineering prepared a hydrology report for the proposed project in October 2008. In addition, in accordance with mitigation measure HYD-2 from the AVSP FEIR, Westland Civil Inc. prepared a SUSMP with drainage plans for the proposed project in February 2014. The report addresses SUSMP and Low Impact Development (LID) requirements for the County of Los Angeles and City of Agoura Hills.

The project site is currently undeveloped and contains entirely pervious surfaces. Existing stormwater runoff from the site drains onto Agoura Road, then flows westerly to drain inlets approximately 500 feet west of Cornell Road. The inlets drain to an improved, concrete-lined, rectangular channel (Chesebro Channel) that crosses under Agoura Road (Westland Civil, Inc., 2014).

The proposed project would increase amount of impervious surfaces on the project site, and so would reduce the amount of water that percolates into the ground and increase the amount of water that is discharged to the storm drain system. In addition, construction activities and



operation of the project could result in an increase in pollutants in runoff during storm events. If large amounts of bare soil are exposed during the rainy season, or in the event of a storm, finely grained soils could be entrained, eroded from the site, and transported to drainages. The amount of material that could potentially erode from the site during temporary construction activities would be greater than under existing conditions due to the loss of vegetation and movement of soils. Further, replacing natural vegetated cover with pavement would increase pollutant loads. Natural vegetated ground cover can both absorb water and filter out pollutants. In contrast, paved surfaces accumulate pollutants such as deposits of oil, grease, and other vehicle fluids and hydrocarbons. Traces of heavy metals deposited on streets and parking areas from auto operation and/or fall out of airborne contaminants are also common urban surface water pollutants. During storm events, these pollutants would be transported into drainage systems by surface runoff, to Lindero Canyon Creek, Cheseboro Creek, or Medea Creek, and ultimately into the regional watershed. In addition to motor vehicle related contaminants, the project would introduce landscaping and associated maintenance chemicals such as fertilizers, pesticides, and herbicides. Irrigation and storms could wash some of these landscape chemicals into and through local drainage systems and into the watershed.

Regulations under the federal Clean Water Act require that a National Pollutant Discharge Elimination System (NPDES) storm water permit be obtained for projects that would disturb greater than one acre during construction. The developer would be required to obtain a NPDES General Permit for Stormwater Discharges associated with Construction and Disturbance Activities (Order No. 2009-0009-DWQ) (State Water Resources Control Board) (City of Agoura Hills Ordinance No. 97-272), which would require the preparation of a Storm Water Pollution Prevention Plan (SWPPP) to address potential pollutants during construction. It would also require preparation of a Standard Urban Storm Water Mitigation Plan (SUSMP) to address pollutants during the life of the project. Components of a SWPPP typically include, but are not limited to, Best Management Practices (BMP) like silt fences, erosion control blankets, soil stabilizers, proper handling and disposal of wastes, and anti-tracking pads at site exits to prevent the offsite transport of materials. A SUSMP typically includes BMPs for source prevention and treatment control, such as catch basin filters and infiltration/detention basins, as well as minimizing impervious paving. Compliance with the required NPDES permit would ensure that potential impacts to water quality would be minimized.

According to the hydrology report prepared by DTR Engineering (2008), the proposed project would not have an adverse effect to existing drainage conditions and would not cause onsite or offsite flooding. Stormwater collection for the proposed project would involve an onsite underground drainage system with a series of catch basins to collect runoff. The western 1/3 of the site would drain onto Cornell Road. The stormwater would be captured by street catch basins at the southwest corner of Agoura and Cornell Road and an underground storm drain system would be installed and connect to Chesebro Channel at Cornell Road just north of Agoura Road. The eastern 2/3 of the runoff would be collected by a series of catch basins and underground storm drain system and would cross Agoura Road at the driveway entrance. The storm drain would then connect directly to Chesebro Channel. The proposed BMPs to be used are catch basin filters in all onsite catch basins that collect drainage from driveways and parking lots. In addition, the proposed project would use planter boxes for roof drainage where practical. Other BMPs (such as detention basins) were not feasible due to the topography of the site and the underlying natural bedrock that would prevent infiltration. The proposed



stormwater collection infrastructure would be sized to capture the first  $\frac{3}{4}$ " of rainfall in accordance with Los Angeles County requirements (DTR Engineering, 2008; Westland Civil, Inc., 2014). Therefore, impacts would be **less than significant**. The proposed project complies with mitigation measure HYD-2 and therefore it would not apply.

b) The AVSP FEIR found that groundwater impacts would be less than significant (Impact HYD-5).

As discussed in Section XVII, *Utilities and Service Systems*, the proposed project would receive its water supply from the Las Virgenes Municipal Water District (LVMWD). LVMWD's potable water is provided almost entirely through wholesale purchases from Metropolitan Water District of Southern California (MWDSC), which imports water from the State Water Project (SWP) and the Colorado River. Groundwater underlying LVMWD's service area is of poor quality and is not currently used for the potable water supply system (LVMWD UWMP, 2010). The proposed project would not affect groundwater supply.

Groundwater recharge depends upon the amount of area and water available for infiltration. As discussed above, development of the proposed project would result in decreased infiltration rates. However, according to the soil engineering study prepared for the proposed project (Refer to Section VI, *Geology and Soils*) groundwater was not encountered in the project site. Therefore, development of the proposed project would not affect groundwater supplies or groundwater recharge. Impacts related to groundwater would be **less than significant**.

c, d) The project would not alter the course of any stream. However, the proposed project would alter the drainage pattern of the project site by reducing infiltration during storm events and altering flow paths. Any increases in runoff over existing conditions could result in increased channel erosion, and sediment transport downstream, which could result in greater siltation in downstream catchments. However, as discussed above, adherence to the City's urban runoff program and implementation of design features to capture and treat stormwater runoff would reduce the quantity and level of pollutants in runoff leaving the site. Therefore, impacts related to erosion, siltation, and flooding would be **less than significant**.

g, h) The AVSP FEIR found a significant but mitigable impact related to structures within the 100-year floodplain. Mitigation measure HYD-3(a) (Hydrology Study) was required for alteration of any onsite open channels and mitigation measure HYD-3(b) (Public Facilities Flood Protection) was required to protect trunk sewer manholes adjacent to Lindero Canyon Creek and Media Creek. These mitigation measures would not apply to the proposed project.

According to the Federal Emergency Management Agency (FEMA), the project site is located in Zone X, which is characterized by a minimal risk of flooding and located outside the 100-year flood hazard area (FEMA FIRM No. 06037C1244F, effective 09/26/2008). Therefore, development of the proposed project would not expose people or structures to significant flood hazards and would not impede or redirect flood flows. **No impact** would occur.

i, j) The AVSP FEIR found that impacts related to seiches and tsunamis would be less than significant. The AVSP FEIR did not analyze impacts related to mudflows or dam inundation.

There are no dams or levees located in the vicinity of the project site. Thus, the potential for flooding due to dam failure is low. Seismic events can induce oscillations, called seiches, of the



surface of an inland body of water that varies in period from a few minutes to several hours. Tsunamis are large sea waves produced by submarine earthquakes or volcanic eruptions. The project site is not located close to the ocean or an inland body of water and is at an elevation sufficiently above sea level to be outside the zone of a tsunami or seiche. Therefore, **no impact** would occur.

**HYDROLOGY AND WATER QUALITY MITIGATION MEASURES**

As **no significant impacts** would occur, no mitigation measures are required. The proposed project has provided drainage plans in accordance with mitigation measure HYD-2 from the AVSP FEIR and therefore this mitigation measure would not apply.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>X. LAND USE AND PLANNING</b>				
-- Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

a) The AVSP FEIR found that the AVSP would not physically divide an establish community and impacts would be less than significant (Impact LU-1).

The project site is bounded by Agoura Road to the north, Cornell Road to the west and undeveloped land to the east and south. The project involves development of a vacant site on the border of an urbanized area. The area is planned for development in the AVSP. The proposed project would not physically divide an established community. **No impact** would occur.

b) The AVSP FEIR found that the AVSP would be consistent with the intent of the City’s 1992 General Plan and other land use policies and impacts would be less than significant (Impact LU-3). Since certification of the AVSP FEIR, the City adopted a new General Plan in 2010. The



following discusses consistency with the City’s current General Plan (2010) and zoning ordinance.

The proposed project is consistent with the City General Plan, including the following policies. Specifically, the project would implement Housing Element Goal H-3 and Policy H-3.1 and Land Use and Community Form Goal LU-26 and Policies LU-26.1, LU-26.2, LU-26.3, and LU-26.4:

- **Goal H-3 Provide Adequate Sites to Achieve a Diversity of Housing.** Provide opportunities for a range of housing types suited to residents of varying lifestyle needs and income levels.
- **Policy H-3.1 Variety of Housing Choices.** Provide site opportunities for a full range of housing types, locations, and densities to address the diverse needs of Agoura Hills’ residents.
- **Goal LU-26 Pedestrian-Oriented Mixed-Use Village.** Transformation into a pedestrian-oriented village containing a mix of retail shops, restaurants, theaters, entertainment, and housing that serves as a destination for residents and visitors to Agoura Hills.
- **LU-26.1 Diversity of Uses.** Accommodate a range of uses, including community-serving retail, entertainment, office, public and quasi-public, visitor-serving hotel, housing, and complementary uses.
- **LU-26.2 Site Development and Design.** Create a walkable, vibrant pedestrian-oriented district through such techniques as:
  - Breaking of the superblocks into a smaller grid of streets and sidewalks
  - Location of buildings along street frontages, with parking located to the rear or in structures, with building heights transitioning to adjoining districts and open spaces
  - Targeting the development of vertical mixed-use buildings along primary street frontages
  - Development of a unified streetscape and pedestrian-oriented sidewalk improvements along Agoura Road and intersecting streets.
  - Development of shared parking facilities
  - Reduction of the width of the Agoura Road right-of-way to two lanes with a landscaped median
  - Minimization of grading and preservation of oak trees and other native landscapes
- **LU-26.3 Connectivity.** Require that new buildings, pedestrian walkways, and open spaces be located and designed to promote connectivity internally and with adjoining land uses and the nearby trail networks.
- **LU-26.4 Specific Plan.** Require that development be managed in accordance with the land use and development standards, design guidelines, public improvements and public infrastructure and services plans, and implementation processes specified by the Agoura Village Specific Plan.

Two parcels (APNs 2061-029-017 and 2061-029-029) on the project site are zoned and have a land use designation of Open-Space Restricted (OS-R). The purpose of the OS-R district is to designate areas to be preserved as natural open space (AHMC Section 9481). Other than to accommodate a fire lane, these parcels would not be developed and would remain as open



space. Therefore, this portion of the proposed project would be consistent with the General Plan and Zoning Ordinance.

The remainder of the project site is zoned Planned Development (PD) and has a General Plan land use designation of Planned Development District (PD). The PD area designates certain areas for special development and land use regulations that cannot be addressed through the city-wide zoning ordinance. All development in the PD zone is required to conform to the development standards and regulations of the applicable Specific Plan or other regulatory document for the property (AHMC Section 9498). Since the project site is in the Agoura Village Specific Plan (AVSP) area, it is required to adhere to the requirements in the AVSP.

The project site includes areas designated as Zone E and Zone G of the AVSP. Zone G is designated for open space and would remain open space with the proposed project. The proposed mixed-use structures would be developed in Zone E of the AVSP. According to the AVSP, retail, restaurant, and office uses are allowed in Zone E. Apartments and stand-alone residential uses are permitted in Zone E with a Conditional Use Permit (CUP). Assuming approval of the CUP, the proposed project would be consistent with the uses allowed and permitted in the AVSP.

Also, according to the AVSP, the maximum Floor Area Ratio (FAR) in Zone E is 0.35 and the maximum building height is 35 feet or two stories unless hotel or residential is provided on the 3<sup>rd</sup> floor and then the maximum height is increased to 45 feet. The proposed project has a FAR of 0.25. The proposed buildings would be three stories with residential on the 3<sup>rd</sup> floor and would have a maximum height of 45 feet. Therefore, the proposed project is consistent with the AVSP requirements for Zone E.

The AVSP includes design standards and architectural guidelines to provide for aesthetically sensitive development. Adherence to the following AVSP development standards would reduce impacts to scenic resources and reduce the visual impacts associated with alteration of the natural topography due to development:

- Development shall relate to the natural surroundings and grading should be minimized by following the natural contours as much as possible.
- Graded slopes shall be rounded and contoured to blend with the existing terrain.
- Significant natural vegetation shall be retained and incorporated into the project whenever possible.
- The natural contours of the land shall be respected when developing on sloped properties. Terraced parking lots, stepped building pads, and larger setbacks shall be used to preserve the general shape of natural landforms and to minimize grade differentials with adjacent streets and with adjoining properties.
- Natural amenities such as views, mature trees, creeks, riparian corridors, and similar features unique to the site shall be preserved whenever possible.
- Prominent and distinctive natural features of the area shall be preserved and integrated as open space for the use and visual enjoyment of all village patrons and residents.
- Development shall be clustered on less environmentally sensitive areas of the site to maximize open space, preservation, and resource protection.
- Oak trees shall be preserved and incorporated into the project whenever possible.



- New developments shall consider, preserve, or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and where appropriate, preserve riparian habitats to a natural state.
- A transition between development and adjacent open space shall be designed to help preserve the rural character of the area. Such transitions may include buffer areas and landscaping to blend development with the surrounding open area.

Further, the AVSP includes architectural design guidelines for roofs, parapets, signage, lighting, landscaping, exterior building materials, and colors to ensure cohesive design. The proposed project would be required to adhere to the AVSP design guidelines. The project follows the natural contour by placing the buildings at progressively higher levels as the ground slopes up. The site has 59 oak trees, 30 of the trees would remain, therefore the project is preserving and incorporating as many oak trees as possible. There are no riparian corridors on the site. There is an ephemeral drainage in the southwest corner of the site that would not be impacted by the project. The project would leave the eastern parcel as open space, this area as well as the proposed landscaping would act as a transition between the development and adjacent open space.

The proposed project would require approval of an Agoura Village Development Permit, with consideration of the following requests:

- Tentative Parcel Map
- Partial street vacation of Cornell Road and Agoura Road
- Vacation of Cleveland Drive within the boundary of the project site
- Conditional Use Permit
- Oak Tree Permit to remove scrub oak and 29 oak trees, and to encroach within the protected zone of 30 oak trees
- ~~Variance for retaining wall heights in excess of six feet~~

With the approvals listed above, the project would be consistent with the AVSP, the City's General Plan and City Municipal Code, including the Zoning Code. Impacts related to land use and planning would be **less than significant**.

c) The project site is not subject to, or near, an adopted habitat conservation plan (HCP), natural community conservation plan (NCCP), or any other approved local, regional, or state habitat conservation plans (City of Agoura Hills General Plan 2035 EIR, February 2010). Therefore, **no impact** would occur.

#### **LAND USE AND PLANNING MITIGATION MEASURES**

Because there would be **no significant impacts**, no mitigation measures are required.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XI. MINERAL RESOURCES**

-- Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Discussion**

a, b) According to the California Division of Mines and Geology (DMG), no significant mineral deposits are present in the city of Agoura Hills (Agoura Hills General Plan 2035, March 2010). The majority of the City north of Agoura Road is classified as MRZ-1, with the remaining area, including the AVSP area and project site, being classified as MRZ-3. MRZ-3 identifies areas where the significance of mineral deposits cannot be evaluated from available data. The proposed project is not located within or in proximity to an area classified as MRZ-1 and there has been no known mining in the area of the project site. Therefore, the proposed project would not affect the availability of mineral resources and **no impact** would occur.

**MINERAL RESOURCES MITIGATION MEASURES**

Because there would be **no significant impacts**, no mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	--------------

**XII. NOISE**

-- Would the project result in:

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|





	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	--------------

**XII. NOISE**

-- Would the project result in:

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates



uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

Existing Setting

The most common sources of noise in the project site vicinity are transportation-related, such as automobiles, trucks, and motorcycles. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level. Noise is also a concern because of its proximity to areas sensitive to noise exposure. On October 22, 2014, Rincon Consultants, Inc. performed two 15-minute, weekday noise measurements using an ANSI Type II integrating sound level meter. The noise monitoring results are summarized on Table 11. Figure 7 shows the noise measurement locations.

**Table 11  
 Noise Measurement Results**

Measurement Number	Date and Time	Measurement Location	Primary Noise Source	Leq (dBA) <sup>1</sup>
1	10/22/14 2:12-2:27 p.m.	West side of project site near Cornell Road	Vehicles on Agoura Road	58.3
2	10/22/14 2:33-2:48 p.m.	North side of project site on Agoura Road, near existing residence	Vehicles on Agoura Road	66.2

*Source: Rincon Consultants, Inc. Recorded during field visit using ANSI Type II Integrating sound level meter. See Appendix E for noise measurement results.*

<sup>1</sup> *The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement the Leq was over a 20-minute period.*

Noise levels near the project site ranged from about 58 to 66 dBA Leq. The primary source of roadway noise near the project site is automobile traffic on Agoura Road immediately north of the project site. According to the Figure 4.9-2 (Noise Contours-Existing) in the Agoura Hills General Plan Update EIR, a majority of the project site is within the 60 dBA CNEL noise contour for US-101. The project site is not within the 65 or 60 dBA CNEL noise contours.

Regulatory Setting and Thresholds

**Operational Noise**

The City of Agoura Hills has adopted a noise ordinance (AHMC Section 9656 et. seq.) that establishes ambient noise standards for all property within various noise zones. The AHMC sets an exterior noise standard of 55 dBA (1-hour Leq) between 7:00 a.m. and 10:00 p.m. and 50 dBA





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Noise Measurement Locations

Figure 7

between 10:00 p.m. and 7:00 a.m. for residential properties (AHMC Section 9656.2). The interior noise level for residential properties is set at 45 dBA for all hours (AHMC Section 9656.3). However, if the pre-project ambient noise level exceeds any of the listed standards, the ambient noise level is treated as the baseline for determining compliance of the project with the other provisions of the noise ordinance. According to AHMC Section 9656.2, it is unlawful to create noise when measures on residential property to exceed the following:

1. The noise standard for a cumulative period of more than 15 minutes in any hour
2. The noise standard plus five dbA for a cumulative period of more than 10 minutes in any hour
3. The noise standard plus 10 dbA for a cumulative period of more than five minutes in any hour
4. The noise standard plus 15 dbA for a cumulative period of more than one minute in any hour
5. The noise standard plus 20 dbA for any period of time

For operational noise, impacts would be significant if project-related onsite activities would generate noise exceeding the allowable standards in the City's Noise Ordinance or if noise associated with project traffic would generate increases shown in Table 12.

**Table 12**  
**Significance of Changes in Operational**  
**Roadway Noise Exposure**

Ldn or Leq in dBA	
Existing Noise Exposure	Allowable Noise Exposure Increase
45-50	7
50-55	5
55-60	3
60-65	2
65-75	1
75+	0

Source: Federal Transit Administration (FTA), May 2006

### ***Construction Noise***

For construction noise, AHMC Section 9656.4 states that activities associated with construction, repair, remodeling, and grading are exempt from the Noise Ordinance provided those activities to not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or any time on Sunday or a legal holiday. Therefore, construction-related noise would be considered significant if construction-related activities occurred outside these hours.



### *Vibration*

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. The vibration thresholds established by the Federal Transit Administration (FTA) are 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB during normal sleep hours for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). The thresholds for the proposed project include 72 VdB during normal sleep hours for residences and hotels, as these are the only sensitive receptors in the vicinity of the site. In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

Vibration impacts would be considered significant if they were to exceed vibration standards for commercial districts as set forth in Section 9305.E of the AHMC. This section states that no operation or activity is permitted which will cause vibration noticeable without instruments at the perimeter of the subject property (a, c, d).

### Operational Noise

According to the Figure 4.9-2 (Noise Contours-Existing) in the Agoura Hills General Plan Update EIR, a majority of the project site is within the 60 dBA CNEL noise contour for US-101. The project site is not within the 65 or 60 dBA CNEL noise contours. At this level, traffic noise from the US-101 would not be significant source of noise on the project site. No sound walls or other mitigation would be required to mitigate noise from the US-101.

Nonetheless, the AVSP FEIR found that new residences planned in the AVSP area would be located in areas that exceed the normally acceptable range for interior and exterior noise (Impact N-3). The following mitigation measures were recommended to reduce noise impacts associated with on-site activity.

- N-3(a) Acoustical Study.** A site-specific acoustical study shall be submitted to the City Planning and Community Development Department as part of the initial application for any residential project located within the project area that is exposed to freeway or arterial traffic noise. This study shall contain specific structural and site design recommendations to be incorporated into the project design to mitigate any noise levels that exceed the City's residential exterior standard of 65 CNEL and interior standard of 45 dBA.
- N-3(b) Operating Hours.** Loading dock and delivery truck (i.e. refrigerator trucks, trash and recycling pick-ups) and parking lot sweeping hours shall be restricted to daytime operating hours (7:00 a.m. to 7:00 p.m.). Delivery trucks entering and leaving the site shall not block driveways and shall be allowed to idle no more than 15 minutes in any half hour period.



- N-3(c) Loading Dock Location.** To the degree feasible, loading docks and delivery areas shall be located out of line of sight and/or oriented away from nearby residences.
- N-3(d) Ventilation Noise.** Parapets that reduce noise from rooftop ventilation systems shall be installed on all project structures.
- N-3(e) Parking Lot Noise.** Surface-texturing materials and landscaping shrubs and trees shall be used in the parking areas to reduce parking lot related noise.
- N-3(f) Mechanical Equipment.** All exterior mechanical equipment shall be oriented away from adjacent residential uses and shall be fitted with sound-rated parapets.
- N-3(g) Interior Noise.** At a minimum, all onsite structures shall include the following or equivalent to achieve an acceptable interior noise level of 45 CNEL:
- Air conditioning or a mechanical ventilation system so that windows and doors may remain closed
  - Double-paned windows and sliding glass doors mounted in low air infiltration rate frames (0.5 cubic feet per minute, per ANSI specifications)
  - Solid core exterior doors with perimeter weather stripping and threshold seals
  - Roof and attic vents facing away from Highway 101
  - Incorporation of these design requirements would be expected to achieve an interior noise level reduction of 25 dB or greater.

The project site is currently undeveloped. As shown in Table 11, existing noise levels in the vicinity of the project site range from about 58 to 66 dBA Leq. The proposed project would add structures and parking areas. The operation of the office, shopping, and restaurant components of the proposed project would involve noise associated with rooftop ventilation and heating systems, delivery trucks, trash hauling, parking lot noise, and on-site circulation of motor vehicles. The proposed project would expose future on-site residences on-site and the existing residence east of the project site to operational noise.

To examine the effects of operational noise on future on-site residents, and in accordance with mitigation measure N-3(a) above, an acoustical study was prepared by Advanced Engineering Acoustics (AEA) in January 2014. According to the study, future roadway noise is projected to be 65.9 dBA CNEL. This would exceed the City's noise standard for 65 dBA CNEL. To achieve an interior noise level of 45 dBA in accordance with mitigation measure N-3(a), the AEA study provided acoustical design recommendations. In accordance with the recommendations contained in the AEA study, mitigation measure N-3(g) has been adapted to the proposed project and required for the proposed project as mitigation measure CS-N-1 (listed under "Mitigation Measures" at the end of this section).

The existing residence located adjacent to the project site would be subject to noise from operation of the proposed project including noise from heating, ventilation, and air conditions (HVAC) systems and other mechanical equipment, noise from delivery trucks, and noise from parking lots.



Noise levels from HVAC and other mechanical equipment can reach 100 dBA at a distance of three feet (EPA, 1971). In accordance with mitigation measures N-3(d) and N-3(f), ventilation equipment would be shielded and mechanical equipment would be located away from sensitive receptors. Typically, the shielding and location of these units reduces noise levels to no greater than 55 dBA at 50 feet from the source. According to the site plans, the mixed-use buildings and their HVAC units and mechanical equipment would be at least 50 feet from the adjacent residence. Therefore, noise levels related to HVAC systems and mechanical equipment would be less than 55 dBA at the nearest sensitive receptor and would be **less than significant**.

Operation of the proposed project would involve occasional delivery trucks and trash hauling trucks going to and from the project site. An individual delivery truck can generate noise of up to 85 dB, which could be disruptive if it were to occur at night or in the early morning hours. However, with implementation of mitigation measure N-3(b) of the AVSP FEIR, loading dock and delivery trucks are limited to the hours of 7:00 a.m. and 7:00 a.m. Therefore, noise generated by daytime deliveries and trash pickups would not adversely affect nearby sensitive receptors due to their relatively low frequency and the lower noise level sensitivity of receptors during the day when deliveries would occur.

The proposed project involves surface parking lots. In addition, the driveway access to the project site is adjacent to the existing residence. Therefore, noise associated with vehicular movement in these areas would be audible at the residence. Table 13 shows exterior noise levels typically associated with driveways and parking lots. The noise sources that would be located within 25 feet of the existing residence would include autos entering and exiting the site and street sweeping. Other noise sources associated with parking areas would be located 50 feet or further from the existing residence.

As shown in Table 13, noise levels could reach 56 dBA from vehicles on the driveway and up to 78 dBA during sweeping at the residence 25 feet from the project site. As mentioned above, the AHMC sets an exterior noise standard of 55 dBA Leq between 7:00 a.m. and 10:00 p.m. for residential properties. However, if the pre-project ambient noise level exceeds any of the listed standards, the ambient noise level is treated as the baseline for determining compliance of the project with the other provisions of the noise ordinance. As shown in Table 11, the pre-project ambient noise level was measured at approximately 66 dBA Leq. In accordance with mitigation measure N-3(a) in the AVSP FEIR, sweeping would only occur between 7:00 a.m. and 7:00 p.m. and would not disrupt normal sleep hours. Street sweeping would occur infrequently and would only be located near the adjacent residence for a few minutes as the sweepers move through the site. Therefore, the street sweeping would exceed the ambient noise level of 66 dBA by 12 dBA (to 78 dBA) for a cumulative period of less than five minutes in an hour. This would not exceed the City's threshold of a temporary increase in ambient noise levels.



**Table 13  
 Parking Lot and Driveway Noise Levels**

<b>Source</b>	<b>Noise levels at 25 feet (dBA)</b>	<b>Noise level at 50 feet (dBA)</b>
Autos at 14 mph (entering and exiting site)	56	50
Sweepers	78	72
Car Alarm Signal	75	69
Car Alarm Chirp	60	54
Car Horns	75	69
Door Slams	70	64
Talking	42	36
Radios	70	64
Tire Squeals	72	66

*Source: Gordon Bricken & Associates, 1996. Estimates based on noise measurements taken at various parking lots. Assumes noise attenuation of 6 dBA per doubling of distance.*

Other noises listed in Table 13 would be located at 50 feet or further from the existing residence. Car alarm signals, car horns, and tire squeals could exceed the existing ambient noise level of 66 dBA. However, these noises would be temporary and infrequent and would not violate the provisions of AHMC section 9656.2. Therefore, with implementation of mitigation measures N-3(b) through N-3(f) from the AVSP FEIR, impacts from noise on the adjacent residence would be **less than significant**.

Traffic Noise

The AVSP FEIR found that project-generated traffic would incrementally increase noise levels on roads in the project vicinity (Impact N-2). The noise increase on Agoura Road between Kanan Road and Cornell Road was found to exceed significance thresholds and mitigation measure N-2(a) (rubberized asphalt) and N-2(b) (sound walls near US-101) were required:

- N-2(a) Rubberized Asphalt.** In potentially noise impacted areas within the Specific Plan, the City shall consider and, if feasible, use rubberized asphalt paving material for street re-paving projects. Studies have demonstrated that this type of paving materials can substantially reduce roadway noise. A 1992 noise study in the City of Thousand Oaks by Acoustical Analysis Associates, Inc. indicated that the use of an asphalt rubber overlay can achieve a noise reduction of from 2 to 5 dBA as compared to standard asphalt.
- N-2(b) Sound Wall.** If traffic-related noise problems from U.S. 101 arise within the Specific Plan area, the City shall investigate and, if feasible, implement appropriate measures to reduce noise impacts at affected receptor locations. Such measures may include, but are not limited to, the use of a sound wall along the northern boundary of the Specific Plan area, between Roadside Drive and U.S. 101. It is estimated that a 10-foot high sound wall located adjacent to the southern edge of U.S. 101 would decrease





noise levels at the property boundaries on the southern side of Roadside Drive from 78.8 dBA to 69.3 dBA (refer to Appendix E for Sound Barrier Loss Estimation Spread Sheet).

As described in greater detail in Section XVI of this Initial Study, the project would generate additional vehicle trips that would also generate noise. The only roadway segment in the vicinity of the project site that is near sensitive receptors is the segment of Agoura Road between Cornell Road and Lewis Road, immediately north of the project site.

Table 14 shows noise levels on that roadway segment with and without project-related traffic. Noise levels in Table 14 were based upon the project specific and cumulative scenarios in the project traffic study. Noise levels were calculated using the Federal Highway Administration’s Traffic Noise Model (TNM) Version 2.5 Look-Up tables.

**Table 14**  
**Operational Roadway Noise Exposure**

Roadway	Projected Noise Level (dBA Leq)				Change In Noise Level (dBA Leq)	
	Existing	Existing + Project	Cumulative Future	Cumulative Future + Project	Change under Existing Conditions	Project’s Contribution to Cumulative Noise Increase
Agoura Road between Cornell Road and Lewis Road	67.6	68.4	69.2	69.8	0.8	0.6

*Estimates of noise generated by traffic from roadway centerline at 32.8 feet in the p.m. peak hour (the peak hour with the highest project-related traffic). Refer to Appendix E for full noise model output. Noise levels presented do not account for attenuation provided by existing barriers or future barriers; therefore, actual noise levels at sensitive receptor locations influenced by study area roadways may in many cases be lower than presented herein. Source: Federal Highway Administration Traffic Noise Model Version 2.5 Look-Up Tables; ATE, 2014.*

For traffic-related noise, impacts would be significant if project-generated traffic results in exposure of sensitive receptors to unacceptable noise levels. The May 2006 *Transit Noise and Vibration Impact Assessment* created by the FTA recommendations were used to determine whether or not increases in roadway noise would be considered significant. The allowable noise exposure increase changes with growing noise exposure, such that lower ambient noise levels have a higher allowable noise exposure increase.

As shown in Table 12, for roadways in the 65-75 dBA range, noise level increases over 1 dBA would be significant. Traffic associated with the proposed project would increase noise levels by an estimated 0.8 dBA as compared to existing conditions and by 0.6 dBA as compared to cumulative conditions without the project (see Table 14). These traffic noise increases would be **less than significant**. Therefore, the project would not generate a permanent significant increase in noise within the project area. Mitigation Measure N-2(a) would not apply.

In addition, as discussed above under operational noise, according to the Figure 4.9-2 (Noise Contours-Existing) in the Agoura Hills General Plan 2035 FEIR, a majority of the project site is within the 60 dBA CNEL noise contour for US-101. At this level, traffic noise from the US-101



would not be significant source of noise on the project site. Mitigation Measure N-2(b) would not be required and would not apply to the proposed project.

Temporary Construction Noise

Impact N-1 of the AVSP FEIR found that temporary construction-related noise impacts would be less than significant with mitigation measure N-1 below:

**N-1 Construction Hours.** Onsite construction activity, including blasting, or involving the use of equipment or machinery that generates noise levels in excess of the 55 dBA standard shall be limited to between the hours of 7 a.m. and 8 p.m., Monday through Saturday pursuant to City Ordinance 9656 and City Municipal Code Section 9666.4. No construction activity shall occur between 8 p.m. and 7 a.m. that generates noise in excess of the 50 dBA standard. No construction activity shall take place on Sundays or legal holidays.

Construction noise represents a temporary impact on ambient noise levels. Construction typically occurs in several distinct phases, each of which has its own unique noise characteristics. The noise-sensitive receptor closest to the project site is the single family residence on Agoura Road approximately 25 feet east of the project’s property line. Table 15 shows typical noise levels associated with conventional construction equipment at a distance of 25 feet from the noise source for each of the major phases of construction.

**Table 15  
 Typical Noise Levels at Construction Sites**

Construction Phase	Type of Equipment	Average Noise Level at 25 Feet*	Average Noise Level at 50 Feet
Clearing	Rubber tired dozers Tractors/Loaders/Backhoes Water Trucks	89 dBA	84 dBA
Excavation and Grading	Graders Excavators Compactors Rubber tired dozers Tractors/Loaders/Backhoes Water Trucks	91 dBA	85 dBA
Foundation/Conditioning	Graders Rubber tired dozers Tractors/Loaders/Backhoes Water Trucks	91 dBA	85 dBA
Laying Subbase, Paving	Cement and Mortar Mixers Pavers Rollers Tractors/Loaders/Backhoes	87 dBA	81 dBA
Finishing and Cleanup	Forklifts Tractors/Loaders/Backhoes	90 dBA	84 dBA

\* Based on a 6 dBA per doubling of distance attenuation rate  
 Source: FHWA Highway Construction Noise Handbook, 2010.



The noisiest activities associated with construction typically occur during the excavation and foundation development stage. This phases of project construction tends to create the highest noise levels because of the use of heavy equipment, including trucks, bulldozers, graders, and scrapers. As discussed above, the AHMC exempts construction noise from noise limitations provided activity occurs during specified hours. Therefore, with implementation of Mitigation Measure CS-N-1, as adapted from the AVSP FEIR and listed at the end of this section, no violations of the City Noise Ordinance or other Municipal Code sections would occur and impacts associated with construction noise would be **less than significant**.

Noise associated with potential blasting at the site is discussed in Section (b).

b) The AVSP FEIR identified a significant but mitigable impact related to vibration during blasting of areas underlain by volcanic bedrock (Impact VIB-1). Mitigation measure GEO-4(a) was required to reduce blasting impacts by requiring a test vibration study and evaluation of vibration impacts.

The Agoura Hills Municipal Code (Article IX, Chapter 3, Part 1, Section 9305.E) prohibits operations or activities in commercial districts that will cause vibration noticeable without instruments at the perimeter of the subject property. Operation of the proposed project would not perceptibly increase groundborne vibration or groundborne noise on the project site above existing conditions, due to the proposed mixed-use nature of the project.

Construction of the proposed project could potentially increase groundborne vibration or noise on the project site, but construction effects would be temporary. Based on the information shown in Table 16, large bulldozers operating on the project site could cause vibration levels up to 87 VdB at the residence 25 feet east of the project site.

**Table 16**  
**Vibration Source Levels for Construction Equipment**

Equipment	Approximate VdB				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46
Large Bulldozer	87	81	79	77	75

Source: FTA, 2006

As discussed above, 100 VdB is the general threshold where minor damage can occur in fragile buildings. As vibration levels would not reach 100 VdB, structural damage would not occur as a result of construction activities. The vibration levels at the residence 25 feet east of the project site would exceed the groundborne velocity threshold level of 72 vibration decibels (VdB) during normal sleep hours established by the FTA for residences where people normally sleep. However, in accordance with mitigation measure N-1 in the AVSP FEIR, construction activity would occur between 7 a.m. and 7 p.m. Therefore, loaded trucks and other construction



equipment would not occur during normal sleep hours and would not exceed the 72 VdB sleep hour threshold.

As discussed in Section VI, Geology and Soils, given the nature of subsurface materials in the project area, it is possible that site preparation may involve blasting in order to establish final grades. Blasting would be used in the event that standard grading methods are inadequate for removal of hard volcanic rock underlying the site. The two primary concerns with respect to blasting are airblast and groundborne vibration. Noise and vibration associated with blasting is a complex function of the size and depth of the charge, hole size, degree of confinement, spatial distribution of charges, and other factors. Although all of these factors cannot be predicted, a general indication of the types of airblast and vibration effects that could occur with blasting is provided. Airblast occurs when energy released in an explosion creates an air overpressure in the form of a propagating wave. This is accompanied by a booming sound that may reach a peak overpressure of about 130 dB and a peak particle velocity of 1.4 inches per second at a distance of 250 feet from the blast (Jones & Stokes Associates, 2001). The project site is adjacent to an existing residence. Assuming that blasting would occur on the southern end of the site where structures would be built into the hillside, the blasting would occur at approximately 250 feet from the residence. Mitigation measure GEO-2 requires a test blast/vibration study and blasting plan if blasting would occur. A blasting plan would ensure that blasting would not damage the nearby residence since it must demonstrate that the blasting can be done safely with respect to existing structures. With implementation of mitigation measure GEO-4(a) from the AVSP, vibration impacts related to blasting would be **less than significant**.

e, f) The project site is not in an airport land use plan or within two miles of a public or private airport. The closest airport is the Van Nuys Airport, about 20 miles east of the site. Therefore, the proposed project would not expose people to excessive noise levels related to airports for people living or working at the project site and its vicinity, and the project would have **no impact** in this regard.

### **NOISE MITIGATION MEASURES**

Mitigation measures CS-N-1 (adapted from AVSP FEIR mitigation measure N-3(a)) and CS-N-2 (modified AVSP FEIR mitigation measure N-1) would apply to the proposed project to meet interior noise standards and to reduce potential construction noise impacts. In accordance with mitigation measure N-3(a) of the AVSP FEIR, an acoustical study was prepared for the proposed project. The AEA study included a “windows-closed” analysis which confirmed that with mitigation measure CS-N-1, residential interiors would meet the 45 dBA requirement of reduced exterior noise. Therefore, with mitigation measure CS-N-1, impacts to future on-site sensitive receptors would be less than significant.

**CS-N-1 Interior Noise.** At a minimum, all onsite structures shall include the following or equivalent to achieve an acceptable interior noise level of 45 CNEL:

- Party wall and floor/ceiling assemblies between separate residential units and other occupied spaces shall be acoustical laboratory-rated for a minimum of 50 STC noise reduction.



- Floor/ceiling assemblies between separate residential units and other occupied spaces shall be acoustical laboratory impact noise-rated for a minimum of 50 IIC impact noise reduction.
- Where any penetrations occur in sound-rated party walls or party floor/ceiling assemblies, the space between the partition and the penetrating object must be properly isolated and insulated to not compromise the sound rating of the partition.
- Exterior entry doors to living areas shall meet or exceed a laboratory rating of 25 STC (including sliding glass doors and French doors that have any frontage view of Agoura and Cornell Roads).
- All windows in the design shall be dual-glazed [adapted from AVSP FEIR Mitigation measure N-3(a)].

**CS-N-2 Construction Hours.** Onsite construction activity, including blasting, or involving the use of equipment or machinery that generates noise levels in excess of the 55 dBA standard shall be limited to between the hours of 7 a.m. and 7 p.m., Monday through Saturday pursuant to the City Municipal Code. No construction activity shall occur between 7 p.m. and 7 a.m. that generates noise in excess of the 50 dBA standard. No construction activity shall take place on Sundays or legal holidays [adapted from AVSP FEIR mitigation measure N-1].

Mitigation measures N-3(b) through N-3(g) would continue to apply to the proposed project. With implementation of these mitigation measures, noise impacts would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XIII. POPULATION AND HOUSING**

-- Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

The AVSP FEIR found that population and housing impacts would be less than significant.



a) Development of the proposed project would add 35 residential units. New residential units on the project site would cause a direct increase in the City’s population. Using the California State Department of Finance average household size for Agoura Hills of 2.83 persons, the increase of 35 dwelling units would generate a resident population of approximately 100 persons (35 units x 2.83 persons/unit). The current City population is approximately 21,211, according to the most recent (May 2016) California Department of Finance estimate. Therefore, the proposed project would result in a citywide population of approximately 21,311 persons (21,211 + 100). SCAG projects that the population of Agoura Hills will be 21,400 by 2035 (SCAG, 2012). The level of population increase associated with the 35 units is within the population forecast, and the physical environmental impacts associated with this increased population growth have been addressed in the individual resources sections of this Initial Study.

As shown in Table 17, the proposed project would not exceed growth forecasts for population, employment, or housing.

**Table 17**  
**Population, Employment, and Housing Projections**

	Existing	Existing + Project	2035 Forecast <sup>1</sup>
Employment	11,600 <sup>1</sup>	11,738 <sup>3</sup>	12,700
Housing	7,620 <sup>2</sup>	7,655 <sup>4</sup>	7,900
Population	21,211 <sup>2</sup>	21,311 <sup>5</sup>	21,400

<sup>1</sup> Data from SCAG’s 2012-2035 RTP/SCS Growth Forecast (Existing employment data from year 2008, no 2016 data available)

<sup>2</sup> Data from California Department of Finance, May 2016

<sup>3</sup> Based on rates used in AVSP FEIR of one employee per 500 square feet of building area for both offices and restaurants. The actual number of employees may be somewhat higher or lower, depending upon the specific businesses that occupy the buildings.

<sup>4</sup> Existing housing units + 35 housing units

<sup>5</sup> Using the California State Department of Finance average household size for Agoura Hills of 2.83 persons, the increase of 35 dwelling units would generate a resident population of approximately 100 persons (35 units x 2.83 persons/unit).

The proposed project would provide for the extension of utilities to serve the project site. However, this infrastructure would not induce population growth beyond project site, as all vacant land surrounding the site would be zoned and designated for open space. Consequently, adjacent vacant lands would be protected from additional urban development.

The project would not substantially increase population, and the physical environmental impacts associated with the project have been addressed in the individual resources sections of this Initial Study. Therefore, impacts relating to population growth would be **less than significant**.

b, c) The project site is currently vacant. Thus, project implementation would not displace existing residents or housing. **No impact** would occur.

**POPULATION AND HOUSING MITIGATION MEASURES**

Because there would be **no significant impacts**, no mitigation measures are required.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XIV. PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

a (i) The City of Agoura Hills is within the jurisdiction, and is part of, the Consolidated Fire Protection District of Los Angeles County (LACFD). Fire Station #65, located at 4206 Cornell Road just south of the City limits, would be the jurisdictional station (first in) for the proposed project. This fire station is located approximately one mile south of the project site and is staffed with a three-person engine company (one Fire Captain, one Fire Fighter Specialist, and one Fire Fighter) (Bagwell, 2014). This fire station is located approximately one mile south of the project site. Fire Station #89, at 29575 Canwood Street also serves the City.

The AVSP FEIR found that no new Fire Department personnel or equipment would be needed for the AVSP. However, the AVSP included mitigation to address wildfire impacts and impacts related to emergency access. PS-3(a) (Fuel modification plan), PS-3(b) (Landscape palette), PS-3(c) (Roundabout Engineering), and PS-3(d) (Emergency Access) were required. Mitigation measures PS-3(c) and PS-3(d) relate to other projects within the AVSP area and do not apply to the proposed project. Mitigation measures PS-3(a) and PS-3(b) are required.



**PS-3(a) Fuel Modification Plan (FMP).** Individual project applicants shall develop a Fuel Modification Plan for all development areas within or adjacent to wildland fire hazard areas. These plans shall be subject to review and approval by the Los Angeles County Fire Department Fuel Modification Unit. The FMP shall be submitted to the City Planning and Community Development Department for approval prior to issuance of a grading or building permit.

Funding and execution of all measures required in the FMP shall be the responsibility of individual developers or land owners. Prior to approval of the FMP the City shall confirm that appropriate easements have been secured and that long-term funding mechanisms are in place to ensure successful implementation of the FMP.

**PS-3(b) Landscape Palette.** The landscape palette for the project shall prohibit the use of highly flammable species near areas of open space.

Development of the proposed project would increase demand for fire protection services. However, the project site is in the existing service area for the LACFD. The proposed project would not require substantial new or expanded fire protection facilities the construction of which would result in adverse environmental impacts (Bagwell, 2014). ~~Although the proposed project may increase the need for personnel or equipment, it would be required to pay standard development impact mitigation fees to the LACFD in accordance with AHMC §8600 et. seq.~~ In addition, the proposed project would be required to comply with Fire Code and LACFD standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements that would reduce fire hazards. Impacts would be **less than significant** with implementation of mitigation measures PS-3(a) and PS-3(b) from the AVSP FEIR.

a (ii) The City of Agoura Hills contracts with the Los Angeles County Sheriff's Department (LACSD) for police protection services. The Malibu/Lost Hills Station, located at 27050 Agoura Road in the City of Calabasas, approximately 2.5 miles east of the project site, serves the project site and surrounding areas. The station patrols the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and Malibu, as well as adjacent unincorporated areas. The Lost Hills Station participates in a reciprocal aid agreement with the nearby communities of Westlake Village and Calabasas, which enables these stations to be called upon for assistance, if necessary.

The AVSP FEIR identified a significant but mitigable impact to LACSD and mitigation measures PS-4(a) (Design Approval) and PS-4(b) (Roundabout Engineering). Mitigation measure PS-4(b) does not apply to the proposed project. Mitigation measure PS-4(a) is required:

**PS-4(a) Design Approval.** Project plans shall be submitted to the Los Angeles County Sheriff's Department Lost Hills Substation for review and comment. All recommendations made by the Department, including, but not limited to, those pertaining to site access, site security, lighting, and requirements for onsite security, shall be incorporated into the design of the project, prior to approval of final building permits.





The proposed project would incrementally increase demand for protection services. However, the addition of 98 residents would not substantially affect service ratios. The proposed project would not result in the need for new or expanded police facilities, the construction of which would cause significant environmental impacts (DeSantis, 2014). The City's General Plan EIR (February 2010) states that there are no current plans for future expansion of the existing police facility, staff, or general equipment inventory. Implementation of mitigation measure PS-4(a) would ensure that the project meets applicable safety standards. Therefore, impacts related to police protection would be **less than significant with implementation of mitigation measure PS-4(a) from the AVSP FEIR.**

a (iii) The AVSP FEIR identified a significant but mitigable impact related to over-capacity conditions at local schools. Mitigation measures PS-5(a) and PS-5(b) were required, and apply to the proposed project.

**PS-5(a) In Lieu Fees.** Individual project applicants shall pay the statutory school fees in effect at the time of issuance of building permits to the appropriate school districts. If permissible, at the time the application is processed, these fees shall include additional District costs associated with impacts to student transportation or other measures to alleviate student transportation overcrowding (e.g. pro-rata contribution to new school transportation systems, student carpooling bulletin boards, etc.)

**PS-5(b) School District Noticing.** The applicant shall notify the Las Virgenes Unified School District of the expected buildout date of the project as soon as possible to allow the District to plan in advance for new students.

The Las Virgenes Unified School District (LVUSD) provides primary and secondary public education services to the project site. The project site is within the attendance area of Agoura High School, Lindero Canyon Middle School, and Sumac Elementary School (LVUSD, 2014). The proposed project would involve development of 35 residential units which could incrementally increase school enrollment and could result in exceedance of capacity at LVUSD schools.

The potential 35 residential dwellings may be occupied by families with school aged children. According to the City's General Plan 2035 EIR (February 2010) a student generation factor of 0.66 elementary school children per household, 0.12 middle school children per household, and 0.1367 high school children per household was used to calculate the anticipated number of new students in the City. Based on these factors, the project would result in approximately 24 new elementary school students, five new middle school students, and five new high-school students.

The project applicant would be required to pay state-mandated school impact fees in accordance with Government Code and mitigation measure PS-5(a). Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Thus, impacts related to schools would be **less than significant implementation of mitigation measures PS-5(a) and PS-5(b) from the AVSP FEIR.**



a (iv) As discussed in Impact PS-7 in Section 4.10, *Public Services*, the AVSP FEIR found that impacts to parks and recreational facilities would be **less than significant** with adherence to City requirements to either dedicate land for parks or pay in lieu fees.

The proposed project includes the development of 35 residential units which could increase the City’s population and increase park demand in the City. As described in greater detail in Section XV below, the project would not increase demand on parks and recreational facilities to the extent that they would suffer substantial physical deterioration or that new park facilities would need to be built to accommodate the demand. Impacts would be **less than significant**.

a (v) Other public services include library services. Library services in the City of Agoura Hills are provided by the County of Los Angeles Public Library System. The Agoura Hills Library is located at the City Hall Civic Center, 30001 Ladyface Court, Agoura Hills, CA 91301. According to the City’s General Plan 2035 FEIR, no new library facilities are expected to be necessary to accommodate the growth proposed under the General Plan Update (Agoura Hills General Plan 2035 EIR, Section 4.11.15, Project Impacts and Mitigation). As stated in this document, Section X. *Land Use and Planning*, this project does not conflict with the General Plan, and would have a less than significant impact. Therefore, **no impact** to other public facilities would occur.

**PUBLIC SERVICES MITIGATION MEASURES**

Mitigation measures PS-3(a) and PS-3(b), PS-4(a), PS-5(a), and PS-5(b) from the AVSP FEIR would be required for the proposed project. With these mitigation measures, impacts to public services would be **less than significant**.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**XV. RECREATION**

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Discussion

a) As discussed in Impact PS-7 in Section 4.10, *Public Services*, the AVSP FEIR found that impacts to parks and recreational facilities would be less than significant with adherence to City requirements.

Currently, the City of Agoura Hills operates six active parks encompassing 47 acres. Including two open space areas totaling 26.3 acres in the city limits, the City owns and operates 73.5 acres of parkland and open space. In addition, approximately 107 acres of parkland/active recreation space are located in the city, but are owned and operated by the State of California. Therefore, the City provides 180.5 acres of parkland and open space. Agoura Hills also has an estimated 1,378.2 acres of protected open space in its borders, which are owned by the City, Santa Monica Mountains Conservancy and Recreation and Conservation Authority, or Homeowners Associations (HOA).

General Plan Policy CS-1.1 recommends a standard of eight acres of park and open space per 1,000 residents. This standard is further broken down into three acres of local park and recreation space per 1,000 persons and five acres of open space per 1,000 persons. Based on a population of 21,311 residents in the City after development of the proposed project, and the current inventory of 180.5 acres of parkland, the City would have a ratio of 8.47 acres of parkland per 1,000 residents with the proposed project. The provision of parkland would exceed the City's standard of three acres of local park and recreation space per 1,000 persons. Furthermore, with an estimated 1,378.2 acres of open space, the City would have 64.67 acres of open space per 1,000 persons with the proposed project, which would greatly exceed the City's standard of five acres of open space per 1,000 persons.

The City of Agoura Hills also provides recreational opportunities through the Agoura Hills/Calabasas Community Center, the Agoura Hills Recreation Center, and six local parks. Parks near the project site include Chumash Park, approximately 1.5 miles north of the project site and Old Agoura Park approximately 1.5 miles east of the project site. The proposed project would include the development of 35 residential units and approximately 100 new residents (see Section XIII, *Population and Housing* for further detail). This has the potential to increase demand for recreation.

Due to the proximity of existing parks, the proposed project would not increase demand on parks and recreational facilities to the extent that they would suffer substantial physical deterioration or that new park facilities would need to be built to accommodate the demand. Therefore, impacts would be **less than significant**.

b) The proposed project would involve some outdoor amenities including an outdoor patio area. As discussed in subsection (a), the proposed project would not require the construction or expansion of recreational facilities. Impacts would be **less than significant**.

## RECREATION MITIGATION MEASURES

Because would be **no significant impacts**, no mitigation measures are required.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVI. TRANSPORTATION/TRAFFIC**

-- Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion**

a, b) As discussed in Impact T-1 Section 4.11, *Traffic and Circulation*, the AVSP FEIR identified significant and unavoidable impact to area roadways. In addition, intersection impacts would be significant but mitigable (Impact T-2) and mitigation measures T-2(a) through T-2(h) were required as determined for a specific project. As discussed below, most of these mitigation



measures are not necessary for the proposed project. A discussion of mitigation measure T-2(g) is provided below.

The transportation/traffic analysis is based in part on the Traffic and Circulation Study prepared for the project by Associated Transportation Engineers (ATE) and dated December 2014 (included in Appendix F).

Operational Traffic Impact Analysis

*Trip Generation*

Trip generation estimates for the proposed project were calculated based on the rates presented in the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th Edition, for Low-Rise Apartment (Land-Use Code #221), General Office (Land-Use Code #710), Specialty Retail Center (Land-Use Code #826), and High-Turnover (Site-Down) Restaurant (Land-Use Code #932). Table 18 summarizes the average daily, a.m., and p.m. peak hour trip generation estimates for the proposed project.

**Table 18  
 Project Trip Generation**

Land Use	Size	Average Daily Traffic		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Apartments	35 units	6.59	231	0.46	16	0.58	20
Specialty Retail	23,013 sf	44.32	1,020	1.33	31	2.71	62
General Office	34,905 sf	11.03	385	1.56	54	1.49	52
High-Turnover Restaurant	11,000 sf	127.15	1,399	10.81	119	9.85	108
<b>Total Trip Generation</b>			<b>3,035</b>		<b>220</b>		<b>242</b>

Source: ATE, 2014

As shown in Table 18, the proposed project would generate 3,035 average daily trips (ADT), 220 a.m. peak hour trips, and 242 p.m. peak hour trips.

The trip generation analysis also accounts for the various trip types that would occur at the site, including “internal capture” and “primary” trips. Internal capture trips are trips made between land uses in the project site (e.g., people working in the office space that would also patronize onsite commercial uses). Internal capture trips would not affect the offsite street network. The ITE mixed-use traffic model was used to determine the number of trips that would be captures on the site. The mixed-use model shows that about 8 percent of average daily and p.m. peak hour trips would be internal to the site, and the remaining 92 percent of the trips would be primary trips. The following outlines the trip type definitions and forecasts. The breakdown of project trip types is shown in Table 19.



**Table 19  
 Project Trip Types**

<b>Trip Generation</b>	<b>ADT</b>	<b>A.M. Peak Hour Trips</b>	<b>P.M. Peak Hour Trips</b>
Total	3,035	220	242
Internal capture trips <sup>1</sup>	243	0	19
Primary Trips <sup>2</sup>	2,792	220	223

<sup>1</sup> Internal Capture Trips = 8% of total trips (not applied in a.m. peak hour period)

<sup>2</sup> Primary Trips = 92% of external trips

Source: ATE, 2014

***Traffic Analysis Methodology***

Because traffic flow on urban arterial roadways is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. In rating intersection operations, “Level of Service” (LOS) A through F are used with LOS A indicating free flow operations and LOS F indicating congested operations. The City of Agoura Hills considers LOS C as the minimum acceptable operating standard for intersections.

The traffic analysis studied the following six intersections:

1. US-101 NB Ramp/Canwood Street/Kanan Road
2. US-101 SB Ramp/Roadside Drive/Kanan Road
3. Kanan Road/Agoura Road
4. Roadside Drive/Cornell Road
5. Agoura Road/Cornell Road
6. Agoura Road/Chesebro Road

Traffic conditions were assessed for the six study area intersections during the a.m. and p.m. peak hours for the following conditions:

- Existing Conditions
- Existing Conditions + Project
- Near-Term (Opening Year 2016) Conditions
- Near-Term (Opening Year 2016) Conditions + Project
- Cumulative (Year 2035) Conditions
- Cumulative (Year 2035) Conditions + Project

Existing peak hour volumes at study area intersections were collected in March of 2013 and October 2013 while school was in session. Levels of service were calculated for the signalized intersections based on the “Intersection Capacity Utilization” (ICU) methodology. Levels of service for unsignalized intersections were calculated using the methodology outlined in the Highway Capacity Manual (HCM).

Near-Term (Opening Year 2016) traffic volumes were forecast for the study-area intersections assuming development of the approved and pending projects proposed for the city of Agoura Hills.



Cumulative (2035) traffic volumes were forecast for the study-area intersections assuming an annual ambient growth factor of 0.75 percent over a 22 year period. The cumulative traffic volumes also include the traffic generated by near-term developments proposed within the City of Agoura Hills.

The City of Agoura Hills has identified the following near-term and cumulative planned and programmed improvements:

*Near-Term Agoura Road/Kanan Road intersection improvement:*

- Southbound Approach: Provide for two left-turn lanes, two through-lanes, and a right-turn lane.
- Northbound Approach: Provide for one left-turn lane, one through lane, and one shared through/right-turn lane
- Eastbound Approach: Provide for two left-turn lanes, and one shared through/right-turn lane.
- Westbound Approach: No change. Provide for one left-turn lane, one through lane, and one right-turn lane.

*Cumulative Agoura Road/Kanan Road Intersection Improvement:*

- Southbound Approach: No change from near-term improvements. Provide for two left-turn lanes, two through-lanes, and a right-turn lane.
- Northbound Approach: Provide for one left-turn lane, two through lanes, and one right-turn lane.
- Eastbound Approach: Provide for two left-turn lanes, one through lane, and one right-turn lane.
- Westbound Approach: No change. Provide for one left-turn lane, one through lane, and one right-turn lane.

*Cumulative Chesebro Road Freeway Overpass Improvement:*

- Widen Chesebro Road Freeway Overpass to three lanes: two southbound lanes and one northbound lane (including a northbound left-turn lane at the US-101 on-ramp).

The planned improvements are assumed for the Near-Term and Cumulative analysis of the Agoura Road/Kanan Road intersection and for the Agoura Road/Chesebro Road intersection.

For Existing + Project, Near-Term + Project, and Cumulative + Project conditions, the project-generated traffic volumes (primary trips shown in Table 19) were distributed and assigned to the adjacent street network. The trip distribution pattern was developed based on existing traffic patterns observed in the study area, input from City staff, and consideration of the most logical travel routes for drivers accessing the proposed development.

***Thresholds of Significance***

The City of Agoura Hills considers LOS C or better acceptable for signalized intersection operations. A significant impact would occur when a proposed project increases traffic demand by:



- 4 percent or greater (V/C increase  $\geq 0.04$ ) at a facility that would operate at LOS C or worse with project-added traffic volumes
- 2 percent or greater (V/C increase  $\geq 0.02$ ) at a facility that would operate at LOS D or worse with project-added traffic volumes
- 1 percent or greater (V/C increase  $\geq 0.01$ ) at a facility that would operate at LOS E/F or worse with project-added traffic volumes

The City of Agoura Hills considers LOS C or better acceptable for unsignalized intersection operations. A significant impact would occur if there is a change in the LOS with the addition of project traffic to LOS D or worse. A significant impact at an unsignalized intersection would also occur if there is an increase in delay by five or more seconds for intersections operating at an unacceptable LOS. A significant impact at an unsignalized intersection would also occur if the California Manual on Uniform Traffic Control Devices (MUTCD) warrants for traffic signals were satisfied with the addition of project traffic.

**Project-Specific Analysis**

Table 20 shows LOS levels for study area intersections in the existing and existing + project conditions and identifies the project-specific impacts based on City thresholds.

**Table 20**  
**Existing + Project A.M. and P.M. Peak Hour Levels of Service**

Intersection	Peak Hour	Existing		Existing + Project		Project Added	
		ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
US-101 NB Ramp/ Canwood/ Kanan	A.M.	0.69	B	0.69	B	0	NO
	P.M.	0.63	B	0.63	B	0	NO
US-101 SB Ramp/ Roadside/ Kanan	A.M.	0.50	A	0.51	A	0.01	NO
	P.M.	0.62	B	0.64	B	0.02	NO
Kanan Rd/Agoura Rd	A.M.	0.59	A	0.59	A	0	NO
	P.M.	0.61	B	0.62	B	0.01	NO
Roadside Dr/ Cornell Rd	A.M.	8.2 sec	A	8.1 sec	A	N/A	NO
	P.M.	8.9 sec	A	9.0 sec	A	N/A	NO
Agoura Rd/ Cornell Rd	A.M.	8.0 sec	A	8.6 sec	A	N/A	NO
	P.M.	9.2 sec	A	10.2 sec	B	N/A	NO
Agoura Rd/ Chesebro Rd	A.M.	8.9 sec	A	9.6 sec	A	N/A	NO
	P.M.	11.7 sec	B	13.4 sec	B	N/A	NO

Source: Associated Transportation Engineers, 2014      N/A = Increase not applicable at LOS C or better

As shown in Table 20, all the study area intersections would continue to operate at LOS B or better with existing + project conditions. The proposed project would not generate project-specific significant impacts as compared to existing conditions based on City thresholds.

Table 21 compares levels of service for study area intersections between Near-Term (Opening Year 2016) and Near-Term + Project conditions. As shown in Table 21, all of the study area intersections would operate at LOS C or better with Near-Term + Project traffic. The project would not generate project-specific significant impacts based on City thresholds.





Table 22 compares Cumulative and Cumulative + Project levels of service for the study area intersections and identifies cumulative impacts based on City thresholds.

**Table 21**  
**Near-Term (2016) + Project A.M. and P.M. Peak Hour Levels of Service**

Intersection	Peak Hour	Existing		Existing + Project		Project Added	
		ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
US-101 NB Ramp/ Canwood/ Kanan	A.M.	0.74	C	0.74	C	0	NO
	P.M.	0.71	C	0.71	C	0	NO
US-101 SB Ramp/ Roadside/ Kanan	A.M.	0.56	B	0.57	B	0.01	NO
	P.M.	0.74	C	0.76	C	0.02	NO
Kanan Rd/Agoura Rd	A.M.	0.41	A	0.43	A	0.02	NO
	P.M.	0.64	B	0.66	B	0.02	NO
Roadside Dr/ Cornell Rd	A.M.	8.5 sec	A	8.5 sec	A	N/A	NO
	P.M.	9.8 sec	A	9.9 sec	A	N/A	NO
Agoura Rd/ Cornell Rd	A.M.	8.4 sec	A	9.1 sec	A	N/A	NO
	P.M.	10.3 sec	B	11.8 sec	B	N/A	NO
Agoura Rd/ Chesebro Rd	A.M.	9.3 sec	A	10.2 sec	B	N/A	NO
	P.M.	14.2 sec	B	17.5 sec	C	N/A	NO

Source: Associated Transportation Engineers, 2014

N/A = Increase not applicable at LOS C or better

**Table 22**  
**Cumulative (2035) + Project A.M. and P.M. Peak Hour Levels of Service**

Intersection	Peak Hour	Existing		Existing + Project		Project Added	
		ICU/Delay	LOS	ICU/Delay	LOS	Increase	Impact?
US-101 NB Ramp/ Canwood/ Kanan	A.M.	<b>0.85</b>	<b>D</b>	<b>0.85</b>	<b>D</b>	<b>0</b>	<b>NO</b>
	P.M.	<b>0.81</b>	<b>D</b>	<b>0.81</b>	<b>D</b>	<b>0</b>	<b>NO</b>
US-101 SB Ramp/ Roadside/ Kanan	A.M.	0.64	B	0.65	A	0.01	NO
	P.M.	<b>0.84</b>	<b>D</b>	<b>0.86</b>	<b>D</b>	<b>0.02</b>	<b>YES</b>
Kanan Rd/Agoura Rd	A.M.	0.58	A	0.59	A	0.01	NO
	P.M.	<b>0.85</b>	<b>D</b>	<b>0.85</b>	<b>D</b>	<b>0.00</b>	<b>NO</b>
Roadside Dr/ Cornell Rd	A.M.	8.8 sec	A	8.8 sec	A	N/A	NO
	P.M.	10.6 sec	B	10.7 sec	B	N/A	NO
Agoura Rd/ Cornell Rd	A.M.	8.7 sec	A	9.6 sec	A	N/A	NO
	P.M.	11.5 sec	B	13.6 sec	B	N/A	NO
Agoura Rd/ Chesebro Rd	A.M.	9.9 sec	A	9.6 sec	A	N/A	NO
	P.M.	14.4 sec	B	16.5 sec	C	N/A	NO

Source: Associated Transportation Engineers, 2014

N/A = Increase not applicable at LOS C or better

**Bold = exceeds City's LOS C standard**

As shown in Table 22, US-101 Northbound/Canwood Street/Kanan Road, US-101 Southbound/Roadside Drive/Kanan Road, and Kanan Road/Agoura Road intersections are forecast to operate at LOS D under Cumulative and Cumulative + Project conditions. The proposed project would increase the V/C ratio at the US-101 Southbound/Roadside



Drive/Kanan Road intersection by 0.02 during the afternoon peak hour, which is a significant impact based on City thresholds.

The *Traffic and Circulation Section* of the AVSP FEIR included mitigation measure T-2(g) to address cumulative impacts for the intersection of US-101 Southbound/Roadside Drive/Kanan Road. The identified improvements include restriping the southbound approach to provide a second left-turn lane. In addition, the east leg of the intersection (Roadside Drive) would be widened to the south to provide two receiving lanes.

The proposed project would be required to pay a pro-rata share of the costs of this improvement to mitigate its cumulative impacts. Therefore, mitigation measure CS-T-1 is required.

**CS-T-1 US-101 Southbound Ramps/Roadside Drive/Kanan Road.** The project applicant shall pay a pro-rata share of the costs of the improvements outlined in mitigation measure T-2(g) of the Agoura Village Specific Plan Final Environmental Impact Report (certified 2006), as determined by the City’s Traffic Engineer. The project’s contribution to the cumulative traffic volumes forecast for the intersection is 6.20 percent. Payment shall be received by the City prior to Certificate of Occupancy.

Table 23 shows the afternoon peak hour level of service for the impacted intersection with mitigation. As shown, with mitigation, the intersection would operate at LOS C during the p.m. peak hour under Cumulative + Project Conditions. Therefore, impacts would be reduced to **less than significant with mitigation**.

**Table 23  
 Mitigated Cumulative + Project P.M. Peak Hour Level of Service**

Intersection	Cumulative + Project		Cumulative + Project With Mitigation	
	V/C	LOS	V/C	LOS
US-101 SB Ramp/Roadside/Kanan	0.86	D	0.79	C

*Source: ATE, 2014*

Congestion Management Program Analysis

***Impact Criteria***

Los Angeles County has developed traffic impact guidelines with criteria and thresholds to assess the impacts of land use decisions made by local jurisdictions on the regional transportation facilities included as part of the Congestion Management Plan (CMP) roadway system. A significant impact would occur when the proposed project increases traffic demand on a facility by 2 percent of capacity ( $V/C > 0.02$ ) causing LOS F ( $V/C . 1.0$ ). If the facility is already at LOS F, a significant impact would occur when the proposed project increases the traffic demand on a facility by 2 percent of capacity ( $V/C > 0.02$ ).



### *Intersection Impacts*

The CMP guidelines require that intersection monitoring locations must be examined if the proposed project would add 50 trips or more during the a.m. or p.m. peak hours. None of the intersections included in this traffic study are included in the CMP network. Therefore, no further review of potential impacts to CMP intersections is required.

### *Freeway Impacts*

The CMP guidelines require that freeway monitoring locations must be examined if the proposed project would add 150 trips during the a.m. or p.m. peak hours. The proposed project would add 88 a.m. and 87 p.m. peak hour trips to U.S. Highway 101 northbound as well as 83 a.m. and 87 p.m. peak hour trips to U.S. Highway 101 Southbound, which is less than 150 trips. Based on CMP criteria, the proposed project would not generate a significant impact to the freeway segments located in the study area.

c) The project site is not close to an airport. The nearest airport is Van Nuys Airport, located approximately twenty miles to the east. The heights of the proposed buildings on the project site would not present any impediments to air traffic and would not affect air traffic patterns. **No impact** would occur.

d, e, f) Impact T-3 in the AVSP FEIR identified a significant but mitigable impact related to pedestrian and bicycle movements, parking, and construction impacts. Mitigation measures T-3(a) (Roundabout Engineering), T-3(b) (Agoura Road/Zone A Pedestrian Crossing), T-3(c) (Pedestrian Friendly Median) do not apply to the proposed project. Mitigation measures T-3(d) through T-3(f) are required:

**T-3(d) Pedestrian Cross Walks.** Pedestrian cross-walks should utilize textured and colored surface treatments to clearly distinguish these areas for pedestrian movement. Final design must be approved by the City's Public Works Director.

**T-3(e) Individual Access.** The design and control of individual access driveways will need to be determined as individual projects are analyzed. Analysis of these individual access driveways should give consideration to traffic volumes to and from each individual site within the Specific Plan and opposing traffic volumes on the adjacent roadway system.

**T-3(f) Construction Impacts.** Prior to individual project approval, short-term construction impacts shall be examined. Where necessary, a construction vehicle management plan shall be developed and implemented. This plan shall include measures to avoid conflicts with nearby businesses and other land uses (such as construction activity notification and timing so as to minimize conflicts) and to minimize the effects on the local street network.

### Site Access

The proposed project does not involve any design features that would create traffic-related hazards. The proposed project driveway on the south side of Agoura Road would have sufficient gaps for traffic to enter and exit the proposed driveway (ATE, 2014). The proposed project would be required to comply with all Los Angeles County Fire Department



requirements regarding hazards and emergency access. The proposed project involves development of a fire access lane and would not result in inadequate emergency access. The proposed project is a mixed-use residential and commercial project and would not result in vehicles or equipment, such as farm equipment or tractors, that would be incompatible with the existing land uses surrounding the area. Impacts would be **less than significant**.

#### Pedestrian Facilities

There are limited pedestrian facilities (e.g., crosswalks/sidewalks) along the roadways in the study area. No sidewalks are currently provided on Agoura Road adjacent to the project site, but a pedestrian crosswalk is provided on the northern leg of the Agoura Road/Cornell Road intersection. Along Cornell Road, a sidewalk is provided on the west side from Agoura Road to Roadside Drive and no sidewalks are provided on the east side of the road.

The proposed project includes improvements to Agoura Road and Cornell Road to enhance pedestrian facilities. The proposed project includes construction of a ten-foot minimum width pedestrian sidewalk on the sections of Agoura Road and Cornell Road adjacent to the project site. Agoura Road would include a new sidewalk, curb and gutter improvements on the south side adjacent to the project site. Cornell Road would include new sidewalks, curb and gutters on both sides of the road. Therefore, the proposed project would improve pedestrian facilities and would not conflict with adopted policies, plans, or programs regarding pedestrian facilities, or otherwise substantially decrease the performance or safety of pedestrian facilities. Impacts would be **less than significant**. Nonetheless, mitigation measures listed above are required.

#### Bicycle Facilities

The project site is served by the Agoura Hills Bikeway System. The existing bicycle facilities located in the study area consist of Class II bike lanes along Agoura Road adjacent to the project site. These Class II bike lanes connect the project site to residential areas east and west of the project.

The proposed project would involve improvements to Agoura Road to enhance bicycle facilities. The proposed project includes bike lane improvements to the section of Agoura Road located adjacent to the site. Bike racks for bicycle parking are also required and would be provided for the proposed project. Therefore, the proposed project would improve bicycle facilities and would not conflict with adopted policies, plans, or programs regarding bicycle facilities, or otherwise substantially decrease the performance or safety of bicycle facilities. Impacts would be **less than significant**.

#### Transit Facilities

Metro bus Route 161 with service between the Thousand Oaks Transit Center and Warner Center operates along Roadside Drive. The closest bus stops to the project site are at the intersection of Roadside Drive and Kanan Road approximately 650 feet (0.12 miles) north of the project site. The proposed project may increase ridership on Metro Route 161. However, the proposed project would not impact transit facilities and would not conflict with adopted policies, plans, or programs regarding transit facilities, or otherwise substantially decrease the performance or safety of transit facilities. Impacts would be **less than significant**.



**TRANSPORTATION/TRAFFIC MITIGATION MEASURES**

Mitigation measures T-2(a) through T-2(f) and T-2(h) from the AVSP FEIR would not apply to the proposed project. Mitigation measure T-2(g) for the intersection of US-101 Southbound Ramps/Kanan Road/Roadside Drive has been adapted for the proposed project as mitigation measure CS-T-1. Mitigation measure CS-T-1 is required for the proposed project and would reduce impacts at that intersection to a less than significant level. Mitigation measures T-3(a) (Roundabout Engineering), T-3(b) (Agoura Road/Zone A Pedestrian Crossing), T-3(c) (Pedestrian Friendly Median) would not apply to the proposed project. Mitigation measures T-3(d) through T-3(f) are required for the proposed project and would reduce potential impacts related to pedestrian access and temporary construction impacts to a **less than significant** level.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVII. UTILITIES AND SERVICE SYSTEMS**

-- Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**XVII. UTILITIES AND SERVICE SYSTEMS**

-- Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste?                              | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Discussion**

a, b, e) The AVSP FEIR found that wastewater impacts associated with the AVSP would be less than significant.

The major sewer trunk lines in the City of Agoura Hills are owned and operated by the Las Virgenes Municipal Water District (LVMWD). Wastewater generated by the City of Agoura Hills is treated at the Tapia Water Reclamation Facility, operated by the LVMWD. The Tapia Water Reclamation Facility has a capacity of 16 million gallons per day (mgd), but is slated to reduce capacity to an average 12 mgd to improve nutrient removal. This facility treats an average of 9.5 mgd (LVMWD, 2014). Therefore, there is an available capacity of 2.5 mgd after the expected reduction in capacity.

Development of the mixed-use project would increase the need for wastewater services. Table 24 shows the anticipated increase in wastewater generation associated with the proposed project based on wastewater generation rates in the Agoura Hills General Plan 2035 FEIR.

**Table 24  
 Estimated Wastewater Generation**

Type of Use	Quantity	Generation Factor*	Amount (gpd)
Multi-Family Residential	35 units	330 gallons/unit/day	11,550
Retail	23,013 sf	0.1 gallons/ sf/day	2,301
Office	34,905 sf	0.2 gallons/sf/day	6,981
Restaurant	11,000 sf	0.1 gallons/ sf/day	1,100
<b>Wastewater Generation</b>			<b>21,932</b>

\*City of Agoura Hills General Plan 2035 EIR, Table 4.14-4  
 Notes: gpd = gallons per day, sf = square feet



As shown in Table 24, the proposed project would generate approximately 21,932 gallons per day or 0.022 mgd. The Tapia Water Reclamation Facility's has 2.5 mgd surplus treatment capacity. Therefore, the reclamation facility capacity would be able to accommodate the project, and no expansion of the reclamation facility is expected to be needed. Therefore, impacts related to wastewater treatment would be **less than significant**.

According to the AVSP FEIR, the truck sewer lines in the project vicinity are anticipated be able to accommodate the increase in wastewater generated by new development planned in the AVSP. No expansion of wastewater conveyance facilities would be required. Impacts to wastewater conveyance systems would be **less than significant**.

c) As discussed in Section IX, *Hydrology and Water Quality*, the proposed storm drain facilities would be constructed to adequately accommodate runoff. Other than minor on-site improvements and installation of catch basins, no new storm drainage facilities would be required. The impacts associated with construction of improvements and catch basins on site are discussed throughout this Initial Study. Impacts would be **less than significant**.

d) The AVSP FEIR found that impacts related to water supply for buildout of the AVSP area would be less than significant with implementation of water conservation methods.

The Las Virgenes Municipal Water District (LVMWD) supplies potable water in the City of Agoura Hills. The LVMWD has no local sources of water and obtains all of its potable water from the Metropolitan Water District of Southern California (MWD), which in turn receives water from the State Water Project. The LVMWD's 2010 Urban Water Management Plan (UWMP) provides scenarios for water supply in the District. These scenarios include a "multiple dry year" scenario in which drought conditions exist for consecutive years and water supply is diminished. As shown in Table 25, LVMWD's total surplus water supply is anticipated to be 147 AFY in 2017 during the multiple dry year scenario, and is anticipated to increase to 2,755 AFY in 2022 and increase to 2,823 AFY in 2027, followed by smaller surpluses in 2032 and 2037.

In January 2014, the Governor of California declared a drought state of emergency (CA.gov, 2014). In response, LVMWD has set outdoor irrigation restrictions and developed incentive programs for water conservation measures (LVMWD, 2014).



**Table 25  
LVMWD Water Supply and Demand – Multiple Dry Year**

<b>Water Sources</b>	<b>2017</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>	<b>2037</b>
Imported – MWD (AFY)	27,474	29,081	30,020	29,465	29,037
Recycled (AFY)	6,366	7,907	9,488	10,496	10,808
Groundwater	0	0	0	0	0
<i>Total Water Supply (AFY)</i>	<i>33,839</i>	<i>36,988</i>	<i>39,468</i>	<i>39,961</i>	<i>39,864</i>
<i>Total Water Demand”(AFY)</i>	<i>33,639</i>	<i>34,233</i>	<i>36,645</i>	<i>38,523</i>	<i>39,653</i>
<b>Difference</b>	<b>147</b>	<b>2,755</b>	<b>2,823</b>	<b>1,438</b>	<b>192</b>

Source: 2010 Urban Water Management Plan, LVMWD, 2011, Table 7.17

Table 26 shows water demand associated with the proposed project, based on water demand rates used in the City’s General Plan 2035 FEIR.

**Table 26  
Estimated Water Demand**

<b>Type of Use</b>	<b>Quantity</b>	<b>Water Demand Factor</b>	<b>Amount (gpd)</b>
Multi-Family Residential	35 units	532 gpd/du	18,620
Retail	23,013 sf	20 gpd/1,000 sf	460
Office	34,905 sf	20 gpd/1,000 sf	698
Restaurant	11,000 sf	20 gpd/1,000 sf	220
<b>Water Demand</b>			<b>19,998</b>

Source: Agoura Hills General Plan 2035 FEIR (2010), Table 4.14-3

\* Conservatively assume all developed area as commercial development

Notes: gpd = gallons per day, du = dwelling unit, sf = square foot

The proposed project would generate demand for 19,998 gallons per day (gpd) or 22.4 AFY, which would represent approximately 15 percent of the total 2017 regional surplus water supply. The anticipated demand from the proposed project would not exceed available water supplies shown in Table 25. Therefore, impacts related to water supply would be **less than significant**.

f, g) The AVSP found that area landfills have adequate capacity to accommodate the increase in trash associated with the AVSP and impacts would be less than significant (Impact PS-6).

There are two landfills at which waste from the proposed project could be disposed. The Calabasas Sanitary Landfill, operated by the Los Angeles County Sanitation Districts, is located





at 5300 Lost Hills Road in Calabasas. The Simi Valley Landfill, privately operated, is located at 2801 Madera Road in Simi Valley. Both landfills serve the City of Agoura Hills, as well as other communities. The Calabasas Sanitary Landfill is permitted to accept up to 3,500 tons per day and the average daily tonnage of waste received during 2013 was 741 tons per day. The Simi Valley Landfill is permitted to accept up to 6,000 tons per day, and received an average of 2,263 tons per day in 2013 (CalRecycle, 2013; CalRecycle, 2014). Therefore, the Calabasas Sanitary landfill has an estimated remaining capacity of 2,759 tons per day and the Simi Valley Landfill has an estimated remaining capacity of 3,737 tons per day.

Table 27 shows the anticipated increase in solid waste associated with the proposed project based on wastewater generation rates in the Agoura Hills General Plan 2035 FEIR (2010). As shown, assuming no recycling or refuse, the proposed project would generate an estimated 0.365 tons of solid waste per day during the operation phase of the project. This is approximately 0.01 percent of the daily capacity (3,500 tons) permitted at the Calabasas Sanitary Landfill and 0.006 percent of the daily capacity (6,000 tons) at the Simi Valley Landfill. Based on a diversion rate of 58 percent (recycling of waste not including construction and demolition debris), which the City achieved for the year 2012 (the latest year for which data is available) through various programs and policies, the solid waste would equate to 0.004 percent of the allowed tonnage per day at the Calabasas Landfill, and 0.003 percent of the allowed daily tonnage at the Simi Valley Landfill. Furthermore, although the construction phase of the proposed project could generate waste, compliance with the requirements of the City’s Construction and Demolition Debris Recycling Program would reduce the amount of waste entering the landfills from this phase of the project. As both landfills have sufficient capacity for the next 35-50 years, solid waste generated by the project would have a **less than significant** impact on the permitted remaining capacity of either landfill.

**Table 27**  
**Estimated Solid Waste Generation**

Type of Use	Quantity	Waste Generation Factor	Amount (pounds per day)	Amount (tons per day)
Multi-Family Residential	35 units	10 lbs/du/day	350.0	0.175
Retail/	23,013 sf	0.005 lbs/sf/day	115.1	0.058
Restaurant	11,000 sf	0.005 lbs/sf/day	55.0	0.028
Office	34,905 sf	0.006 lbs/sf/day	209.4	0.105
<b>Solid Waste Generation</b>			<b>729.5</b>	<b>0.365</b>

Source: Generation rates in City of Agoura Hills 2035 General Plan FEIR (2010), Table 4.14-5  
 Notes: lbs = pounds, du = dwelling unit, sf = square foot, numbers may not add due to rounding

**UTILITIES AND SERVICE SYSTEMS MITIGATION MEASURES**

Because **no significant impacts** were identified, no mitigation measures are required.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Discussion**

a) As discussed in Section V, Cultural Resources, mitigation measures CS-CR-1 through CS-CR-3 would be required to reduce impacts to cultural resources to a **less than significant** level. With the implementation of these measures, impacts to examples of California history or prehistory would be reduced to a **less than significant** level. As discussed in Section IV, Biological Resources, the proposed project would potentially affect rare or endangered plants or animals and mitigation measures CS-BIO-1 through CS-BIO-10. With these mitigation measures, the proposed project would not cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

b) All potential environmental impacts of the project have been determined in this Initial Study to have no impact, a less than significant impact, or less than significant with mitigation incorporated. Cumulative impacts with some of the resource areas have been addressed in the individual resource sections Air Quality, Biological Resources, Cultural Resources, Greenhouse Gases, Public Services, and Utilities and Service Systems. Some of the other resource areas were determined to have no impact or would result in improvements in comparison to existing



conditions and therefore would not contribute to cumulative impacts and did not warrant further analysis, such as Mineral Resources and Agricultural Resources. There are no other known projects in development or under consideration that would affect the other resource areas. As such, cumulative impacts would also be **less than significant** (not cumulatively considerable).

c) In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. Impacts related to air quality, hazards, and noise would be reduced to less than significant with mitigation listed above. Incorporation of mitigation measures would reduce impacts to human beings to a **less than significant** level.



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### **Persons Contacted**

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