1.0 EXECUTIVE SUMMARY

1.1 PROJECT LOCATION

The Lyons Canyon Ranch Project site encompasses approximately 234.8-acres of land located in unincorporated Los Angeles County (refer to Exhibit 3-1, Regional Location Map). Lyons Canyon Ranch is contiguous with The Old Road, west of Interstate 5, just south of Sagecrest Circle and north of Calgrove Road near Towsley Canyon Park (refer to Exhibit 3-2, Local Vicinity Map).

1.2 PROJECT OBJECTIVES

The primary goal of the project is to achieve the development of a high quality mix of residential components, including single-family residences, and senior housing with a focus on natural open space conservation and orderly development of the project site. Listed below are additional project objectives that help establish consistency with this primary goal:

- Create a semi-rural, non-suburban residential community utilizing a clustered development footprint;
- Conservation of sensitive habitat areas through avoidance, restoration, and native landscaping;
- Provide a range of housing types, including large lot single-family detached, smaller lot single-family detached, and multi-family housing for seniors;
- Improve public safety in the region by dedicating a site for the construction of a new Los Angeles County Fire Station; and
- Provide opportunities for local and regional recreation through the dedication of open space, trails, and recreational facilities.

In addition, Lyons Canyon Ranch will achieve consistency with the following policies described in the Santa Clarita Valley Area Plan:

- Permit appropriate land uses that are compatible with existing adjacent uses and with the resource values present in identified Significant Ecological Areas;

- Encourage the appropriate mix of land use types to prevent disharmony and degradation;

- Encourage development of convenient services to meet the needs of the Santa Clarita Valley including health; education; welfare; police and fire protection; governmental operations; recreation and cultural facilities; and public utilities.

- Provide an efficient local circulation pattern, both motorized and pedestrian.

- Encourage appropriate aesthetic (landscaping, signage, street furniture, design themes, etc.) measures so that each community can be clearly distinguished from neighboring ones.

1.3 PROJECT SUMMARY

The project includes a mix of single-family residential, senior housing, public facility, and open space uses. The 234.8-acre project site includes 93 single-family detached homes, 93 senior condominium units, and 130.26 acres of parks and undisturbed open space. The project also includes a 2.05-acre site for a new fire station, which is intended to serve the proposed development and surrounding areas.

Two primary entrances to the community are proposed from The Old Road: Street "A" and Street "E". These streets are approximately 1,100 feet apart. Street "A" is proposed as the community's main access road, and extends from The Old Road to the southwest portion of the site, where it intersects with Streets "B", "C", and "D". Streets "A", "B","C", and "D" provide access to the majority of the large lot single-family neighborhood (Lots 1-71). Street "G" also provides access to a small number of homes within this neighborhood. Streets "H" and "I", proposed along the subject property's western edge provide connection points to the properties located west of the site.

Street "E" provides secondary access from the Old Road and direct access to lots 72-86. Street "F" provides access to lots 87-93 and intersects with "A" Street. This simple circulation system will provide vehicle access to all proposed residential units consistent with Los Angeles County standards.

Regional access to the project site will be provided via Interstate 5, the Golden State Freeway, which runs generally north-south east of the project site. On and off-ramps in both directions are located at Calgrove Boulevard, near the southeast corner of the project site. Calgrove Boulevard intersects with The Old Road, which parallels Interstate 5 as a frontage road adjacent to the project site. Access to the project site from Interstate 5 is also provided in both directions via the Pico/Lyons Avenue on/off-ramps located north of the site.

The project site will be mass-graded in one phase, with a total grading volume of 3.8 million cubic yards, which will be balanced on-site. Grading of the project site is anticipated to take approximately 24 months to complete.

1.4 SUMMARY OF PROJECT ALTERNATIVES

NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative assumes the Lyons Canyon Ranch project would not be implemented and other improvements would not be constructed. The existing project site would remain unaltered and in its current condition. All infrastructure improvements including water, wastewater, drainage and circulation facilities identified in the Lyons Canyon Ranch project would not be constructed.

NO DENSITY BONUS ALTERNATIVE

The No Density Bonus Alternative would reduce the amount of residential units to 120 consisting of 90 detached single-family residential units and 30 multi-family residential units. Under the No Density Bonus Alternative, the senior housing development area and the fire station lot would be developed with 30 multi-family residential units. This development scenario would include 66 fewer residential units when compared to the proposed project. The backbone infrastructure, including roadways and water/sewer service pipelines, would be similar to the Proposed Project. No fire station site would be constructed under this alternative. Refer to Exhibit 6-1, *No Density Bonus Alternative*.

REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative would include the development of 73 single-family lots in the southeastern portion of the site and would eliminate the multi-family lot and the fire station lot. The multi-family lot and the fire station lot would be developed with 20 single-family residential units for a total of 93 residential units. In addition, all lots proposed along "E" and "F" Streets would be eliminated. Refer to Exhibit 6-2, *Reduced Density Alternative*.

SEA/OAK TREE AVOIDANCE ALTERNATIVE

The SEA/Oak Tree Avoidance Alternative would include the development of 120 residential units clustered in the northeast portion of the project site. The development in the northeast portion of the site would eliminate encroachment into SEA numbers 63 and 20. This alternative would include 75 multi-family and 45 single-family residences. The fire station lot is eliminated as part of this alternative, due to the smaller development area. Refer to Exhibit 6-3, *County SEA/Oak Tree Avoidance Alternative*.

1.4.1 ALTERNATIVES CONSIDERED BUT REJECTED

ALTERNATE PROJECT SITE

The alternative project site encompasses approximately 115 acres of land directly southeast of the proposed project. The alternative site is directly adjacent to the Old Road and the Calgrove/Old Road intersection, and possesses many on-site constraints (topographic, biological, hydrologic, geologic, etc.). For purposes of this analysis, several vacant properties were considered immediately west, north, south and east of the proposed project site. The development of the alternative site at a similar density and configuration as the proposed project was found to result in environmental impacts similar, or in some areas, greater than the proposed project. Therefore, this project alternative was rejected because it does not comply with CEQA's stated objective of reducing environmental impacts when considering alternatives.

1.5 SUMMARY OF IMPACTS AND RECOMMENDED MITIGATION MEASURES

Project environmental impacts, recommended mitigation measures, and residual impacts, if any, are summarized in Table ES-1, Summary of Project Environmental Impacts, Mitigation Measures, and Residual Impacts. Table ES-1 is organized by environmental issue area as discussed in Chapter 5.0 of this EIR.

Geology, Soils, and Seismicity		
Impact	**Mitigation Measures**	**Residual Impact**
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS FROM GROUND FAILURE, INCLUDING SETTLEMENT, COLLAPSE, GROUND LURCHING, LIQUEFACTION, OR LATERAL SPREADING.	*Soil Settlement and Collapse* **GEO1.** All on-site soils that are prone to settlement and collapse in areas proposed for development of structures shall be removed and replaced with engineered fill. *Ground Lurching* **GEO2.** If identified during on-site grading by a registered Geotechnical Engineer and/or Geologist, Holocene-age alluvium shall be removed and replaced with engineered fill in areas proposed for development where alluvium directly overlies bedrock, to preclude the possibility of ground lurching. *Liquefaction* **GEO3.** All liquefaction-prone soils identified during on-site grading by a registered Geotechnical Engineer and/or Geologist, shall be removed from areas proposed for development and replaced with engineered fill.	Less Than Significant Impact.
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS FROM LANDSLIDES OR OTHER SLOPE FAILURES.	*Seismically Induced Landslide and Rock Fall* **GEO4.** Setbacks from over-steepened slopes or grading of slopes to a shallower angle, as recommended in the project's *Geotechnical Report*, shall be required to minimize rock fall hazards to development along the northern boundary of the proposed project site. *Deep Landslides and Slope Failures* **GEO5.** Adequate structural setbacks for homes and commercial sites shall be required, and surface drainage shall be directed away from the toe of affected steep slopes, in order to prevent landslides or other slope failures in on-site areas susceptible to block-and/or toppling-type failures.	Less Than Significant
RESULT IN SUBSTANTIAL WIND OR WATER SOIL EROSION OR THE LOSS OF TOPSOIL, EITHER ON- OR OFF-SITE	**GEO6.** As soon as grading is completed for each lot, establish a protective vegetative cover in all disturbed areas via planting and/or seeding, then place a temporary protective cover, such as jute netting, mulch, hay, or other non-erodible form of ground cover, until a vegetative cover is established. **GEO7.** Divert surface drainage from cut and fill slopes via brow ditches; collect surface drainage in ditches with relatively shallow gradients; and provide a means to inhibit sediment runoff into natural drainages until a protective vegetative cover effectively mitigates further soil erosion. Place energy-dissipating devices in drainages subject to increased runoff. **GEO8.** When grading, attempt to minimize the area of disturbance.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
ON-SITE EXPANSIVE SOILS COULD POSE A RISK TO PEOPLE	**GEO9.** Incorporate recommended foundation designs, where applicable, to preclude any adverse effects on proposed structures in areas characterized by expansive soils, including but not limited to post-tensioned slabs, mat-slabs, or other foundation systems for residential structures.	Less Than Significant
DEVELOPMENT OF THE PROPOSED PROJECT WOULD RESULT IN THE DESTRUCTION, COVERING, OR MODIFICATION OF SIGNIFICANT FOSSIL BEDS AT THE PROJECT SITE	**GEO10.** Fossil beds impacted by the proposed project should be excavated by a qualified paleontologist to gather and record which species of vertebrate and macroinvertebrate fauna existed onsite during the Pliocene. The fossil record should be preserved in an appropriate museum, such as the Natural History Museum of Los Angeles County, and the results published for the benefit of the scientific community and general public.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS FROM SUFACE FAULT RUPTURE.	No mitigation measures are required.	No Impact.
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS FROM SEISMIC GROUNDSHAKING.	No mitigation measures are required.	Less Than Significant.
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS FROM SEISMIC GROUNDSHAKING.	No mitigation measures are required.	Less Than Significant.
DEVELOPMENT OF THE PROPOSED PROJECT WOULD RESULT IN THE DESTRUCTION, COVERING, OR MODIFICATION OF UNIQUE GEOLOGIC OR PHYSICAL FEATURES AT THE PROJECT SITE.	No mitigation measures are recommended that could feasibly reduce the significant impacts referenced.	Significant and Unavoidable

Hydrology and Water Quality		
Impact	**Mitigation Measures**	**Residual Impact**
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD ALTER THE DRAINAGE PATTERN OF THE PROJECT SITE	**HWQ1** Debris/detention basins are planned on the westerly side of the intersection of "A" Street and "F" Street and the northerly side of the intersection of "A" Street and "D" Street. In addition to the debris basins, additional detention basins will be placed in series above each debris basin to prevent the debris basins from becoming jurisdictional dams under the California Division of Safety of Dams. The result of these basins will not only retain the debris that would usually accumulate at the existing double 8-foot by 8-foot box culvert but they will significantly retard the design storm water runoff from the project area. In addition to these drainage improvements the following items will also be required: **a)** The development area adjacent to the double 8-foot by 8-foot culvert shall be raised to reduce the flooding potential. The final elevation shall be determined by FEMA during their review of a Conditional Letter of Map Revision request. **b)** In addition, the County of Los Angeles shall require the developers to obtain a drainage acceptance letter from the property owner immediately downstream of the double 8-foot by 8-foot culvert (mobile home park) prior to issuance of grading permits. **c)** The proposed debris/detention basin shall be cleared/maintained as necessary by the Los Angeles County Department of Public Works Flood Control Division, as appropriate. **HWQ2.** Storm drains, culverts, channels, and outlets shall be designed per County of Los Angeles and Federal Emergency Management Agency (FEMA) Design Standards. **HWQ3.** Erosion protection (or energy dissipating structures) shall be placed at outlets to natural drainage channels in order to minimize the potential for erosion, subject to approval by the Los Angeles County Department of Public Works Flood Control Division, as appropriate	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD INCREASE STORMWATER FLOW RATES.	Refer to mitigation measures HWQ1 through HWQ3. No additional mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD PLACE STRUCTURES IN A DESIGNATED FLOOD HAZARD ZONE.	Refer to mitigation measure HWQ1 regarding drainage facilities. Additionally, the mitigation measure listed below would serve to further address floodplain impacts. **HWQ4.** Any construction in the FEMA Zone A shall require a Conditional Letter of Map Revision prior to issuance of grading permits. A Letter of Map Revision shall be required prior to building occupancy.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD INCREASE POLLUTANT LOADS IN THE LOCAL STORM DRAIN SYSTEM AND RECEIVING WATER BODIES.	**HWQ5.** Project developers shall prepare and submit a Notice of Intent to comply with the Construction General Permit to the State Water Resources Control Board. **HWQ6.** Project developers shall prepare a Stormwater Pollution Prevention Plan (SWPPP) per requirements of the Construction General NPDES Permit. **HWQ7.** Project developers shall comply with post-construction Best Management Practice (BMP) requirements as detailed in the L.A. County Standard Urban Stormwater Mitigation Plan (SUSMP). **HWQ8.** The project developer shall construct and maintain all structural stormwater filtration devices as shown on Figure 5.2-4 above. The final location of the proposed structural stormwater filtration systems shall be determined by the Los Angeles County Department of Public Works prior to issuance of building permits. **HWQ9.** In order to limit the amount of coliform leaving the site in stormwater runoff, project developers shall implement public education programs for residents concerning the clean up of pet waste. Also, pet waste disposal bags and containers shall be provided around parks and other areas of high pet traffic. **HWQ10.** The Los Angeles County Department of Public Works shall be responsible for the operation and maintenance of any debris/detention basins on the site, which include: -Dispersion of alluvial sediment deposition at inlet structures, thus limiting the extended localized ponding of water. -Periodic sediment removal to ensure adequate storage and treatment volume. -Monitoring of the basin to ensure it is completely and properly drained. -Outlet riser cleaning. -Vegetation management to prevent marsh vegetation from taking hold, and to limit the growth of habitat for disease-carrying fauna. -Removal of graffiti, litter, vegetative and other debris. -Preventative maintenance on monitoring equipment. -Vegetative stabilization of eroding banks. **HWQ11.** The project's Homeowners' Association or the Los Angeles County Department of Public Works shall be responsible for the operation and maintenance of any storm water filters on the site, to include: -Providing adequate access for inspection and maintenance. -Removal of accumulated trash, paper and debris. -Corrective maintenance including removal and replacement of top layers of media. -Complete replacement of filter media every 3 to 5 years. -Periodic removal of vegetative growth. **HWQ12.** The project's homeowners' association or the Los Angeles County Department of PublicWorks shall be responsible for the operation and maintenance of any storm water clarifiers on the site, which include: -Inspection prior to the beginning of the storm season. -Regular inspection following storm events. -Removal of accumulated sediment, trash and debris.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
	HWQ13. Pesticide applications shall be managed through educational and other source control efforts, including the installation of efficient landscape irrigation systems in common areas and the development of guidance on applying these types of chemicals for contractors maintaining landscape areas. Examples of material which may be used for education may include educational pamphlets currently available through L.A. County and/or other sources (i.e., http://www.americanoceans.org/runoff/epa-bro.htm). Because of the concerns regarding indicators of human pathogens, education programs shall emphasize animal waste management, such as the importance of cleaning up after pets and not feeding wild animals, such as pigeons, seagulls, ducks and geese. The project applicant shall create and distribute these pamphlets to landscape contractors prior to on-site planting. **HWQ14.** The project applicant shall prepare an herbicide/pesticide program to be utilized by landscaping contractors on commonly owned landscaped areas. This program shall include requirements to minimize the use of herbicides and pesticides in these landscaped areas and shall be prepared and in place prior on-site planting.	
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER CUMULATIVE PROJECTS WOULD CONTRIBUTE TO CUMULATIVE HYDROLOGY AND WATER QUALITY IMPACTS	Refer to Mitigation Measures HWQ 1 through HWQ 14.	Less Than Significant

Hazards		
Impact	**Mitigation Measures**	**Residual Impact**
CONSTRUCTION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO SOURCES OF POTENTIAL HEALTH HAZARDS, AS A RESULT OF PAST AND FUTURE ON-SITE ACTIVITIES	**HAZ1.** If unknown wastes or suspect materials are discovered during construction by the contractor, which he/she believes may involve hazardous waste/materials, the contractor shall: ♦ Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area; ♦ Notify the project engineer of the implementing agency; ♦ Secure the areas directed by the project engineer; and ♦ Notify the implementing agency's Hazardous Waste/Materials Coordinator.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING EXPLOSION OR THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT RESULTING FROM EXISTING ON-SITE ABANDONED OIL WELLS	**HAZ2.** If deemed appropriate by the project's geotechnical engineer, the on-site abandoned oil well shall be re-abandoned per current DOGGR standards prior to issuance of any grading permit.	Less Than Significant
CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF HAZARDOUS MATERIALS ASSOCIATED WITH VARIOUS ON-SITE DEBRIS PILES.	**HAZ3.** All miscellaneous debris shall be removed off-site and properly disposed of at an approved landfill facility prior to issuance of building permits. Once removed, a visual inspection shall be completed by a representative from the Los Angeles County Public Works Department, of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Based on the results of the sampling, the applicant's consultant and a representative from the Los Angeles County Public Works Department shall determine the level of remediation efforts that may be required (if any).	Less Than Significant
CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF HAZARDOUS MATERIALS ASSOCIATED WITH ABOVEGROUND STORAGE TANKS.	**HAZ4.** One 500-gallon abandoned AST was observed atop a hill within the central portion of the project site. The tank shall be removed and properly disposed of at an appropriate landfill facility prior to issuance of building permits. Once removed, exposed soils shall be visually observed to confirm the presence/absence of staining (an indication of contamination migration into the subsurface). If observed, stained soils shall be tested to identify appropriate remedial activities (if necessary).	Less Than Significant
CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF POLYCHLORINATED BIPHENYLS ASSOCIATED WITH ON-SITE TRANSFORMERS	**HAZ5.** The fallen power line and transformer shall be removed off-site and properly disposed of at an approved landfill facility prior to issuance of building permits. Additionally, other transformers on-site shall be removed/relocated during site construction/demolitions. This removal/relocation shall be conducted under the purview of the local utility purveyor to identify proper handling procedures regarding potential PCBs. The concrete on which the power line and transformer fell shall be removed and properly disposed of at an approved landfill facility. Any stained soils observed underneath the concrete shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
IMPLEMENTATION OF THE LYONS CANYON RANCH PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF UNKNOWN HAZARDOUS MATERIALS ASSOCIATED WITH THE ON-SITE CONCRETE STORAGE STRUCTURE.	**HAZ6.** The contents of the concrete structure shall be removed off-site and properly disposed of at an approved landfill location prior to issuance of building permits. Once removed, a visual inspection of the area beneath the removed materials shall be performed. Any stained concrete or soil (depending on material) observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required. If concrete is present and staining is noted, the concrete shall be removed and disposed of at an appropriate permitted facility. Once removed, exposed soils shall be visually observed to confirm the presence/absence of staining (an indication of contamination migration into the subsurface). If observed, stained soils shall be tested to identify appropriate remedial activities (if necessary).	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF HAZARDOUS MATERIALS ASSOCIATED WITH UNDOCUMENTED PIPES AND POSSIBLY UNDERGROUND STORAGE TANKS, AT THE SITE.	**HAZ7.** The terminus of all undocumented pipes shall be defined. The primary concern with pipes that extend into the ground surface is the potential for the pipe(s) to act as a ventilation apparatus for an undocumented UST. Should a UST be present, the UST shall be removed and properly disposed of at an approved landfill facility prior to issuance of building permits. Once removed, a visual inspection of the areas beneath and around the removed UST shall be performed. Any stained soils observed underneath the UST shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.	Less Than Significant
CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM THE POTENTIAL PRESENCE OF HAZARDOUS MATERIALS ASSOCIATED WITH AN ON-SITE WATER WELL.	**HAZ8.** The on-site well shall be properly removed and abandoned prior to issuance of a building permit pursuant to the latest procedures required by the Los Angeles County Department of Health Services with closure responsibilities for the wells. Any associated equipment (i.e., piping) shall be removed off-site and properly disposed of at a permitted landfill. A visual inspection of the areas beneath the removed materials (if present) shall be performed. Soil sampling around the well shall be performed, as determined appropriate by a qualified Phase II professional.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT COULD HAVE THE POTENTIAL TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS, RESULTING FROM THE POTENTIAL PRESENCE OF PESTICIDE RESIDUES FROM PAST AGRICULTURAL OPERATIONS AT THE SITE.	**HAZ9.** The project site was utilized for agricultural purposes in the past and may contain pesticide residues in the soil. Soil sampling shall occur throughout the project site, especially in areas of past development (as identified within the historical aerial photographs) prior to issuance of building permits. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify proper handling procedures that may be required.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING EXPLOSION OR THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT ASSOCIATED WITH AN OFF-SITE PETROLEUM PIPELINE.	**HAZ10.** Pipeline operators shall be notified in advance of any grading activity in the vicinity of the off-site oil pipeline. Any specific requirements of the operator to avoid disturbance that could create a safety hazard shall be fully implemented. Possible methods to protect underground utilities include dielectric coating, cathodic protection, mortar coating, or encasement in cement slurry or concrete. **HAZ11.** Prior to grading in the vicinity of the off-site oil pipeline, the location of the pipeline shall be marked. Underground Service Alert shall be notified 48 hours in advance of grading and shall clear the pipeline location prior to grading activity.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING EXPLOSION OR THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT, OR TO EXPOSE PEOPLE TO EXISTING SOURCES OF POTENTIAL HEALTH HAZARDS RESULTING FROM EXISTING HAZARDOUS MATERIALS, ASSOCIATED WITH LISTED HAZARDOUS MATERIALS SITES.	No mitigation measures are required.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH, OR OTHERWISE ADVERSELY AFFECT, ADOPTED EMERGENCY RESPONSE OR EVACUATION PLANS.	No mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT, IN CONJUNCTION WITH OTHER CUMULATIVE PROJECTS IN THE SANTA CLARITA VALLEY, WOULD NOT RESULT IN CUMULATIVELY CONSIDERABLE HAZARDS AND HAZARDOUS WASTE IMPACTS.	Refer to Mitigation Measures HAZ1 through HAZ8. No other mitigation measures are required.	Less Than Significant

Noise		
Impact	**Mitigation Measures**	**Residual Impact**
PROJECT-RELATED GRADING AND CONSTRUCTION ACTIVITIES COULD RESULT IN TEMPORARY NOISE IMPACTS TO NEARBY NOISE-SENSITIVE RECEPTORS.	**N1.** Construction shall be limited to the hours of 7:00 AM to 7:00 PM on any working day except Sundays and holidays, in accordance with the County's Noise Control Ordinance (County Code Section 12.080.440.) **N2.** The following measures shall be implemented to reduce potential construction noise impacts on nearby sensitive receptors: a) During all site excavation and grading, the construction contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. b) The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. c) The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.	Significant and Unavoidable
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD RESULT IN A PERMANENT INCREASE IN TRAFFIC-RELATED NOISE IN THE PROJECT AREA.	**N3.** A sound barrier, with a minimum wall height of six feet, is required for ground-floor frontline outdoor active use areas on the following lots: Lots 83 through 85 and Lots 87-90. **N4.** A sound barrier, with a minimum wall height of seven feet, is required for ground-floor frontline outdoor active use areas on Lot 86. **N5.** A sound barrier, with a minimum wall height of five feet, is required for ground-floor frontline outdoor active use areas on the following lots: Lot 91-94. **N6.** Balconies or decks, if proposed for the frontline dwelling units on Lots 83 through 94 and the attached senior housing, which are directly exposed to traffic noise from The Old Road and I-5, shall require a noise barrier with a minimum height of five feet along the perimeter of balconies or decks. Balconies or decks on the side of the building facing away from the street or outside of the 65 dBA CNEL impact zone shall not require sound wall protection. **N7.** Mechanical ventilation, such as an air-conditioning system, shall be required for lots 76 and 99 and all units in the senior housing lot. **N8.** Windows with a minimum STC-30 rating are required for bedrooms exposed to I-5 traffic on Lots 83-88, except for Lot 86, where windows with a minimum STC-32 rating are recommended for bedrooms exposed to I-5 traffic. **N9.** Windows with a minimum STC-34 rating are required for sleeping quarters associated with the proposed fire station.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD RESULT IN A PERMANENT INCREASE IN STATIONARY-SOURCE NOISE IN THE PROJECT AREA.	No mitigation measures are required	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE TRAFFIC-RELATED NOISE IMPACTS.	Refer to mitigation measures N3 through N9. No additional mitigation measures are available to reduce cumulative noise impacts on the proposed residential dwellings.	Significant and Unavoidable

Air Quality		
Impact	**Mitigation Measures**	**Residual Impact**
CONSTRUCTION OF THE PROPOSED PROJECT WOULD INCREASE AIR POLLUTANT CONCENTRATIONS IN THE PROJECT AREA	Because project-related construction emissions would exceed the SCAQMD thresholds for criteria pollutants, the following mitigation measures are recommended to minimize air pollutant emissions. Compliance with the fugitive dust palliative SCAQMD Rules 402 and 403 have been utilized in the impact analyses to reduce potential PM_{10} emissions to the extent practicable, although not to within SCAQMD thresholds. **AQ1.** The construction contractor shall be responsible for ensuring that all measures listed in Table 5.5-7, *Standard Measures for Construction-Related Emissions* are implemented. To achieve the particulate control efficiencies shown, it is assumed that finished surfaces will be stabilized with water and/or soy-based, or other non-chloride-based, dust palliatives and isolated from traffic flows to prevent emissions of fugitive dust from these areas. In addition, the following water application rates are assumed: ♦ Roads traveled by autos, rock trucks, water trucks, fuel trucks, and maintenance trucks: up to twice per hour; ♦ Roads traveled by scrapers and loaders; active excavation area: up to three times per hour; and ♦ Finish grading area: up to once every two hours. **AQ2.** All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. The construction contractor shall ensure that all construction equipment is being properly serviced and maintained. **AQ3.** The construction contractor shall utilize, as much as possible, precoated/natural colored building materials, water-based or low-VOC coating on all interior and exterior walls, and coating transfer or spray equipment with high transfer efficiency, such as HVLP spray method, or manual coatings application such as a paintbrush, hand roller, trowel, spatula, dauber, rag, or sponge. **AQ4.** Low-emitting paints and solvents shall be used on all future on-site structures.	Significant and Unavoidable
OPERATION OF THE PROPOSED PROJECT WOULD INCREASE AIR POLLUTANT CONCENTRATIONS IN THE PROJECT AREA.	**AQ5.** To the extent feasible, future on-site buildings shall incorporate design principles of the Energy Star program and/or Leadership in Energy and Environmental Design (LEED) program, and associated energy-saving features, including energy-efficient heating and cooling systems, tight construction and ducts, improved insulation, high-performance windows, and built-in energy efficient appliances. **AQ6.** Parking areas	Less Than Significant
OPERATION OF THE PROPOSED PROJECT COULD CREATE CARBON MONOXIDE IMPACTS IN THE PROJECT AREA.	No mitigation measures are required**.**	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD CONFLICT WITH THE ADOPTED SCAQMD AIR QUALITY MANAGEMENT PLAN.	No mitigation measures are recommended that could feasibly reduce the significant impacts referenced.	Significant and Unavoidable

Impact	Mitigation Measures	Residual Impact
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT WOULD CREATE OBJECTIONABLE ODORS THAT COULD ADVERSELY AFFECT PEOPLE IN THE VICINITY OF THE PROJECT SITE.	Refer to mitigation measures AQ1 through AQ6. No additional mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER CUMULATIVE PROJECTS WOULD RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE CRITERIA POLLUTANTS	Refer to mitigation measures AQ1 through AQ6. No additional mitigation measures are required.	Significant and Unavoidable

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF AMBROSIA CONFERTIFLORA *(WEAKLEAF BURWEED) PLANTS KNOWN ONSITE*	**BIO1** **Seasonal Survey, Gather and Grow in Preserved Habitat, and Maintain and Monitor.** A seasonal survey shall be conducted prior to ground disturbing activities to account for all occurrences of this species and any other special-status plant species onsite. The survey shall be conducted by a qualified botanist acceptable to the Department of Regional Planning (DRP) and familiar with the flora of the Santa Susana Mountains. Seeds shall be gathered when ripe and transferred to a native plant nursery experienced with propagating *Ambrosia confertiflora* or similar species, and grown out to 1-gallon container size. These plants shall be planted in suitable preserved habitat outside fuel modifications areas found onsite at a ratio of 10 plants for every 1 plant impacted by the project. Potential *Ambrosia confertiflora* mitigation areas onsite are shown on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for plantings of *Ambrosia confertiflora* is approximately 5.58 acres. Seeds required for restoration plantings of *Ambrosia confertiflora*, as well as for other special-status species to be impacted onsite (see discussion below), shall be obtained from the native trees, shrubs, herbs, and grasses to be cleared from the project site during construction activities. If additional seeds are required to complete the restoration effort, seeds and/or plant material may also be salvaged from other areas of the project site. Additional seeds should only be collected from areas of the project site that are already disturbed in order to prevent any additional impacts. The seeds from preserved special-status plant species inhabiting the property shall be manually collected, without damage to the living plants or their habitats, during their appropriate seeding periods and used for planting onsite to mitigate for impacts to special-status species. All replacement seed stock shall be obtained from the existing project site vegetation. The contractor shall provide to DRP a list of any materials that must be obtained from other than onsite sources prior to planting. Unacceptable plant material will be rejected, at the contractor's expense, by restoration specialists. The planted plants shall be maintained and monitored for a period of five (5) years after initial planting, with annual reports submitted to the County.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF* AMBROSIA CONFERTIFLORA *(WEAKLEAF BURWEED) PLANTS KNOWN ONSITE (CONTINUED)	**BIO2** **Implement Conditions of Approval Related to Preserve Maintenance.** The Lyons Canyon Ranch project shall provide for the establishment of a Home Owners' Association (HOA) and the preparation of Conditions, Covenants, and Restrictions (CC&Rs) prior to the recordation of the final tract map as a condition of project approval. The HOA shall be governed by CC&Rs that describe all aspects of property maintenance of common area preserves and biological resource mitigation areas under control of the HOA. The HOA shall be fully funded, pursuant to, and consistent with, the recorded CC&Rs. The Lyons Canyon Ranch project HOA shall be responsible to maintain all common areas consistent with the applicable mitigation measures and conditions of approval adopted by the County of Los Angeles. The applicable mitigation measures and conditions of approval that fall under the responsibility of the HOA shall be explicitly specified in the CC&Rs, and shall be verified by the County of Los Angeles prior to recordation of the final tract map. Prior to undertaking any activities within preserve areas, the HOA shall retain the services of a wildlands ecologist acceptable to the DRP and familiar with plants and wildlife native to the Santa Clarita region to provide review and approve of the specific activities in preserve parcels. The ecologist shall also oversee HOA maintenance staff, when performing the following maintenance, to ensure compliance with biological mitigation measures applicable to the project site: • Fuel modification within common areas; • Maintenance of privately owned wetlands restoration areas; • Maintenance of common areas designated as preserves or mitigation areas; and • Maintenance of privately owned trails.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF SPECIAL-STATUS CALOCHORTUS *SPECIES KNOWN ONSITE*	**BIO3** **Supplemental Surveys.** Prior to site disturbance activities associated with the proposed project, supplemental seasonal field surveys for *Calochortus plummerae* and *Calochortus clavatus* shall be conducted to clearly determine and to mark off the exact locations and numbers of plants onsite in the development footprint as well as those to be preserved. Surveys shall be conducted in the spring prior to construction to flag locations of *Calochortus* within and immediately adjacent to the project site. All bulbs and seeds of populations within the grading areas shall be salvaged, translocated, and subsequently planted in preserve areas. Rancho Santa Ana Botanic Garden would be an appropriate and County acceptable facility to conduct the translocation, storage, and ongoing propagation of these species. **Avoidance and Protection.** Areas with *Calochortus* outside of the development footprint shall be avoided and preserved in perpetuity through an appropriate recordable legal instrument. The legal document shall be recorded prior to issuance of a grading permit. A qualified botanist shall survey for, and appropriately mark, all populations of *Calochortus* at Lyons Canyon Ranch that are to be avoided and preserved. Where avoidance and protection is not possible, mitigation shall be accomplished through seed collection, bulb translocation and subsequent planting. **Bulb Translocation.** A pre-construction survey during the peak flowering period, approximately March through June, shall be conducted by a qualified botanist, acceptable to the DRP, in the areas of the project site that will be disturbed, and all individual *Calochortus* plants shall be marked for subsequent relocation. Each impacted *Calochortus* bulb shall be clearly delineated with pin flags for collection by a qualified collector. Bulbs shall be collected after the flowering period when the plants are dormant. Where high lily concentrations exist onsite, the first ten inches or more of topsoil shall be moved in large blocks to the selected revegetation site. The salvaged bulbs or bulb-containing topsoil shall be translocated to an appropriate site(s) acceptable to the DRP within the preserved portions of the project site. **Seed Collection and Propagation.** *Calochortus* are typically grown from seed for mitigation purposes (Carol Bornstein, pers. comm. 30 January 2006). A seasonal survey prior to grading shall be conducted in suitable habitat during and after the flowering season to collect seeds. The survey shall be conducted by a qualified botanist acceptable to the DRP and familiar with the flora of the Santa Susana Mountains. Seeds shall be collected when ripe, cleaned, stored by a qualified nursery or institution with appropriate storage facilities, and transferred to a native plant nursery experienced with propagating *Calochortus* species and grown out to 1-gallon container size. The best time to sow seed is in the fall in conjunction with the onset of rain. *Calochortus* usually takes at least three (3) years to achieve flowering size, depending upon the species (Carol Bornstein, pers. comm. 30 January 2006). These plants shall be planted in suitable preserved habitat onsite and acceptable to the DRP at a ratio of 10 plants for every 1 plant impacted by the project. The propagated plants shall be maintained and monitored for a period of five (5) years after initial planting, with annual reports submitted to the County.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF SPECIAL-STATUS CALOCHORTUS *SPECIES KNOWN ONSITE (CONTINUED)*	**BIO3 (Continued)** **Determine Final Mitigation Sites.** A site analysis plan must be conducted prior to bulb collection to determine potential planting areas and to identify the most appropriate mitigation site(s) acceptable to the DRP. A detailed mitigation plan shall be prepared and submitted to the DRP for review prior to implementation. The plan must be prepared by a qualified botanist as determined by Los Angeles County Director of Planning. Potential mitigation areas for *Calochortus* species onsite are shown above on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for relocation and plantings of *Calochortus* is approximately 28.53 acres. **Prepare Detailed Mitigation Plan.** Following seed and bulb collection, the *Calochortus* shall be relocated into a suitable mitigation site in the undeveloped portion of the project site, or in an adjacent undeveloped acreage that shall be preserved in perpetuity. A qualified botanist shall be selected by the applicant that is acceptable to the County to prepare and implement a detailed mitigation plan. **Please refer to Page 5.6-97 for a full description of these requirements.**	Less Than Significant

LOSS OF CALYSTEGIA PEIRSONII *(PEIRSON'S MORNING-GLORY) PLANTS KNOWN ONSITE*	Implementing Mitigation Measures **BIO1**, specific to *Calystegia peirsonii*, and **BIO2** willmitigate for this impact. Potential *C. peirsonii* mitigation areas onsite are shown above on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for plantings of *Calystegia peirsonii* is approximately 3.50 acres.	Less Than Significant
LOSS OF ERICAMERIA ERICOIDES *SSP.* ERICOIDES *(MOCK HEATHER) PLANTS KNOWN ONSITE*	Implementation of the same methods as described for **BIO1**, specific to *Ericameria ericoides* ssp. *ericoides*, and **BIO2** will mitigate for impacts to *E. ericoides* ssp. *ericoides.* Potential*Ericameria ericoides* ssp. *ericoides* mitigation areas onsite are shown above on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for plantings of *Ericameria ericoides* ssp. *ericoides* is approximately 0.54 acre.	Less Than Significant
LOSS OF JUGLANS CALIFORNICA *VAR.* CALIFORNICA *(SOUTHERN CALIFORNIA BLACK WALNUT) PLANTS KNOWN ONSITE*	**BIO4** **Plant *Juglans californica* var. *californica* Onsite.** To mitigate for the loss of 0.50 acre of *Juglans californica* Alliance, including the loss of approximately 10 individual Southern California Black Walnut trees, plant locally indigenous seeds (walnuts) of *Juglans californica* var. *californica* in a designated mitigation site. *Juglans californica* var. *californica* fruit (walnuts) shall be collected from locally indigenous (onsite) sources. Seeds shall be gathered when ripe and transferred to a native plant nursery experienced with propagating *Juglans californica* for seed storage and subsequent propagation. Seedlings shall be grown out to 1-gallon container size, preferably in liners rather than 1-gallon pots. Seeds are a viable source for mitigation and will be utilized for some replacement. However, nursery-grown plantings should have higher success. These plants shall be planted in suitable preserved habitat found onsite at a ratio of 10 plants for every 1 plant impacted by the project. Since approximately 10 individulas of this species will be impacted from the project, at least 100 trees will be required to mitigate for this species. The seedlings should be monitored and irrigated on a regular basis to ensure survival. *Juglans californica* can also be grown from mature stem cuttings and sprouted in a greenhouse. Rooted cuttings can then be planted at the mitigation site(s). Planting should occur on one or more of the preserve areas onsite on a north-facing slope adjacent to Coast Live Oak Woodland areas. With proper maintenance and monitoring, the impacts should be fully mitigable. No sensitive habitat shall be impacted during *Juglans* mitigation efforts. The planted plants shall be maintained and monitored for a period of five (5) years after initial planting, with annual reports submitted to the County**.** Potential *Juglans californica* var. *californica* mitigation areas onsite are shown above on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for plantings of *Juglans californica* var. *californica* is approximately 6.96 acres. Implementing Mitigation Measure **BIO1** will also mitigate for this impact.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF NAVARRETIA HAMATA *SSP.* HAMATA *(SKUNK NAVARRETIA) PLANTS KNOWN ONSITE*	Implementation of the same methods as described for **BIO1**, specific to *Naverretia hamata* ssp. *hamata*, **and BIO2** will mitigate for impacts to *N. hamata* ssp. *hamata.* Twenty (20) plantings of *N. hamata* ssp. *hamata* will be required to mitigate impacts to this species onsite. Potential *N. hamata* ssp. *hamata* mitigation areas onsite are shown above on Exhibit 5.6-21, Potential Special-status Plant Species Mitigation Areas**.** The estimated mitigation area available for plantings of *N. hamata* ssp. *hamata* is approximately 5.58 acres.	Less Than Significant
LOSS OF RARE PLANTS POTENTIALLY OCCURRING ONSITE	**BIO5** **Conduct Survey, Propagate Seeds, and Plant Onsite.** Since the location or presence of the rare plant species likely to occur onsite is not confirmed, seasonal surveys shall be conducted in suitable habitat at a time when positive identifications can be made. The surveys shall be conducted by a qualified botanist acceptable to the DRP and familiar with the flora of the Santa Susana Mountains. If any of these plants are found to be within the project impact area, then, prior to grading, seeds shall be gathered when ripe and transferred to a native plant nursery experienced with propagating sensitive or similar species, and grown out to 1-gallon container size. These plants shall be propagated in suitable preserved habitat found onsite at a ratio of 10 plants for every 1 plant of each species impacted by the project. The mitigation plantings shall be maintained and monitored for a period of five (5) years after initial planting, with annual reports submitted to the County. Seeding may require several seed sowing events to establish viable reproducing populations at the mitigation site. Implementing Mitigation Measures **BIO1** and **BIO2** will also mitigate for this impact.	If any likely special-status plant species are found onsite, the significance after mitigation would be *significant* if replanting efforts are not successful. If any likely special-status plant species are not found, impacts would be *less than significant*.

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
IMPACTS OF INCREASED DUST AND URBAN POLLUTANTS ON SPECIAL-STATUS PLANT SPECIES	**BIO6** **Apply for 401 Certification.** Prior to the issuance of a grading permit, the project applicant shall obtain coverage under the California Regional Water Quality Control Board's general permit for storm water discharge associated with construction activity and shall comply with all the provisions of the permit, including the development of a storm water pollution prevention plan, which includes provisions for the implementation of best management practices and erosion control measures. Best management practices shall include both structural and non-structural measures. Implementing Mitigation Measures **AQ1 through AQ4** (Mitigation Measures for Dust Control), in the Air Quality section of this EIR, will also mitigate for this impact. **BIO7** **Implement Conditions of Approval Related to Landscaping.** The Lyons Canyon Ranch project shall provide for the establishment of a Home Owners' Association (HOA) and the preparation of Conditions, Covenants, and Restrictions (CC&Rs) prior to the recordation of the final tract map as a condition of project approval. The HOA shall be governed by CC&Rs that describe all aspects of property maintenance of common area landscape, and the overall regulation of aesthetics for the property grounds and buildings. The HOA shall be fully funded, pursuant to, and consistent with, the recorded CC&Rs. The Lyons Canyon Ranch project HOA shall be responsible for maintaining all common areas, that are routinely maintained, consistent with the applicable mitigation measures and conditions of approval adopted by the County of Los Angeles. The applicable mitigation measures and conditions of approval that fall under the responsibility of the HOA shall be explicitly specified in the CC&Rs, and shall be verified by the County of Los Angeles prior to recordation of the final tract map. Prior to landscaping installation, the HOA shall retain the services of a licensed landscape architect acceptable to the DRP and familiar with plants native to the Santa Clarita region to provide review and approval of the landscaping of individual parcels consistent with the plant list approved by the County Biologist. The landscape architect shall also oversee HOA maintenance staff, when performing the following maintenance, to ensure compliance with biological mitigation measures applicable to the project site: • Fuel modification within common areas; • Maintenance of street or roadway landscaping; • Maintenance of parks; • Maintenance of landscaped common areas; and • Maintenance of roadway landscaping. Said landscape architect and/or HOA shall not be responsible for maintenance or oversight of activities within lands dedicated in fee title to Los Angeles County or any other agency. The HOA shall enforce the CC&Rs at all times through the terms outlined in the recorded CC&Rs.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
IMPACTS OF INVASIVE EXOTIC PLANT SPECIES INTRODUCTION INTO NATURAL PLANT COMMUNITIES	**BIO8** **Submit Project Landscape Design Submitted for County Approval.** Project landscape design shall be submitted by a qualified botanist to the County Biologist for review and approval. The review shall ensure that no invasive, exotic plant species such as those listed in the CNPS and California Invasive Plant Council 1999 List (CalIPPC 1999) and subsequent (draft) list for 2005 are used in any proposed landscaping, and that suitable substitutes are proposed. Only locally indigenous native species shall be used in landscaping along a boundary bordering open space/SEA. Native plants used shall include coastal sage scrub, chaparral, and woodland species that currently occur on the project site. **BIO9** **Comply with CC&R Landscape Plan Review.** The CC&Rs for the homes shall prohibit planting any invasive exotic species listed by either CNPS or CalIPPC. Homeowner landscaping plans shall be submitted to the DRP for review and approval consistent with this requirement as described in the CC&Rs. The review shall ensure that no invasive exotic plant species are planted onsite in order to reduce the chance of inadvertent introductions or escapes of invasive exotic species into native habitats, including bordering open space areas and SEAs. Implementing Mitigation Measure **BIO7** will also mitigate for this impact.	Less Than Significant
LOSS OF AND DISTURBANCE TO AQUATIC/SEMI-AQUATIC WILDLIFE DURING CONSTRUCTION	**BIO10** **Implement BMPs.** In order to minimize impacts to aquatic (riparian) habitat and aquatic wildlife due to alteration of the riparian habitat onsite, the construction activities shall be conducted during times of no active channel flows (during the dry season, generally June through October). However, if construction must be conducted while active flows are present within the riparian system, the following measures shall be implemented to minimize impacts: • Equipment contact with the active channel should be avoided, and equipment should enter the active channel only within the permitted and demarcated areas; • Flows should be diverted from the work area prior to initiating work; • Sedimentation barriers should be installed downstream of any work areas within the active channel and should be maintained frequently to ensure they are working properly; • Exposed groundwater should be allowed to settle behind a downstream diversion berm prior to discharge to the primary flow channel; • Turbidity levels should be monitored and minimized to levels consistent with the project's RWQCB General Permit for stormwater discharge requirements (no greater than a 20% increase in turbidity downstream of the work areas); and • All foreign materials and litter should be removed from the channel, including but not limited to trash, concrete, metal, fencing, rebar, Styrofoam, plastic, and any dumped materials.	Less Than Significant

B*iological Resources*		
Impact	**Mitigation Measures**	**Residual Impact**
	BIO11 **Pre-construction Surveys and Relocation.** Prior to grading or site-clearing activities, a qualified biologist acceptable to the DRP shall survey the construction areas of the site to determine if wildlife species are foraging, frequenting, or nesting on or adjacent to the construction areas. If any wildlife species are observed foraging, frequenting, or nesting during construction activities, the wildlife biologist shall allow the wildlife species to escape or shall relocate the wildlife species to a preserved area with similar required habitat. Implementing Mitigation Measure **BIO6** will also contribute to mitigate for this impact.	
LOSS OF AND DISTURBANCE TO AMPHIBIAN WILDLIFE DURING CONSTRUCTION	Implementing Mitigation Measures **BIO6, BIO10, and BIO11** will mitigate for this impact.	Less Than Significant
LOSS OF AND DISTURBANCE TO REPTILE WILDLIFE DURING CONSTRUCTION	Implementation of **BIO11** should mitigate for project-related impacts to reptile wildlife during construction.	Less Than Significant
LOSS OF AND DISTURBANCE TO BREEDING AND NESTING BIRDS DURING CONSTRUCTION	**BIO12** **Comply with Migratory Bird Treaty Act.** To avoid violating the Migratory Bird Treaty Act or Fish and Game Code §3503, a qualified ornithologist shall survey the construction site(s) two weeks prior to initiation of site disturbance to identify any nests of birds that would be directly or indirectly affected by the construction activities. Bird nesting typically occurs from February through August. Some bird species nest outside this period. To protect any active nest sites, the following restrictions on construction are required between February and August (or until nests are no longer active as determined by a qualified biologist). Clearing limits shall be established a minimum of 300 feet in any direction from any occupied nest (or as otherwise deemed appropriate by the monitoring biologist). Access and land surveying shall not be allowed within 100 feet of any occupied nest (or as otherwise deemed appropriate by the monitoring biologist). Onsite nests shall be avoided until vacated. Any encroachment into the 300/100-foot-buffer area around the known nest shall only be allowed if it is determined by a qualified biologist that the proposed activity would not disturb the nest occupants. Construction during the non-nesting season shall occur at the sites only if a qualified biologist has determined that fledglings have left the nest. Occupied nests adjacent to the construction site(s) may need to be avoided for short durations to ensure nesting success. Any nest permanently vacated for the season need not be protected. Implementing Mitigation Measure **BIO11** will also contribute to mitigate for this impact.	Less Than Significant
LOSS OF AND DISTURBANCE TO MAMMAL WILDLIFE DURING CONSTRUCTION	Implementation of **BIO11** should mitigate for project-related impacts to mammal wildlife during construction.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
DIRECT IMPACTS TO SPECIAL-STATUS WILDLIFE SPECIES	**BIO13** **Preconstruction Surveys and Fencing off Sensitive Areas.** Prior to grading or site-clearing activities, a qualified biologist acceptable to DRP shall survey the construction areas of the site to determine if any special-status wildlife species are foraging, frequenting, or nesting on or adjacent to the construction areas. If any special-status wildlife species are observed foraging, frequenting, or nesting during construction activities, the area in which the special-status species was observed should be flagged or fenced off to protect the wildlife species. In addition, the equipment operators shall be informed of the species' presence and provided with pictures in order to help avoid impacts to this species to the maximum extent possible. As part of the environmental training, contractors and heavy equipment operators shall be provided with photographs of expected special-status wildlife species to identify them, and to avoid harming them during construction. **BIO14** **Survey for Nests and Nesting Activity.** Thirty (30) days prior to the onset of construction activities, a qualified biologist acceptable to DRP shall survey within the limits of project disturbance for the presence of any active raptor and bird nests. Any nest found during survey efforts shall be mapped on the construction plans and marked on the ground. If no active nests are found, no further mitigation is required. Results of the surveys shall be provided to the CDFG. If nesting activity is present at any raptor nest site, the active site shall be protected, 100 to 300 feet away from construction activities, until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for bird species in the region of the project site normally occurs from February through August. **BIO15** **Avoid Contact or Harm to Special-status Species.** To avoid impacts to all special-status wildlife species observed onsite, equipment operators shall avoid contact with or harm to any special-status species and any of their sources of cover (e.g. nest, midden, burrow). If a special-status wildlife species is encountered during construction activities, it shall be allowed to escape any danger that may result from construction work, and the onsite biological monitor shall be notified in order to implement all measures necessary to protect the sensitive species. **BIO16** **Replace Required Habitat of Observed Special-status Species.** Existing habitat, required by observed or likely special-status wildlife species, shall be replaced, or compensated for, after all development activities have been completed, as presented below in the Mitigation for Impacts to Natural Vegetation, Including Sensitive Habitats Section. Compensation for lost habitat onsite shall be accomplished at least in part through improving habitat conditions of preserved onsite habitats, such as through removal of invasive exotic plant species and replacing them with indigenous native species. A residual impact will remain since there will be a reduction of the total area of habitat available onsite. Implementation of Mitigation Measures **BIO11 and BIO12** described above should also mitigate project-related impacts to special-status wildlife species.	Direct impacts to active nests would be reduced to a *less-than-significant* level. The significance after mitigation for habitat loss would be *significant and unavoidable* because approximately 118.74 acres of suitable occupied foraging and nesting habitat onsite will be permanently lost (including the loss of 98.86 acres resulting from direct grading impacts and the loss of an additional 19.88 acres resulting from indirect fuel modification impacts).
*LOSS OF COOPER'S HAWK (*ACCIPITER COOPERII*) AND FORAGING AND NESTING HABITAT*	Implementation of Mitigation Measures **BIO12 through BIO16** (described above) should adequately mitigate project-related impacts to Cooper's Hawk, except for cumulative loss of habitat.	Significant and unavoidable

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
*LOSS OF BARN OWL (*TYTO ALBA*) FORAGING AND NESTING HABITAT*	Implementation of Mitigation Measures **BIO12 through BIO16** (described above) should mitigate project-related impacts to Barn Owl.	Less Than Significant
*LOSS OF OAK TITMOUSE (*BAEOLOPHUS INORNATUS*) AND FORAGING AND NESTING HABITAT*	Implementation of Mitigation Measures **BIO12 through BIO16** (described above) should adequately mitigate project-related impacts to Oak Titmouse, except for incremental loss of habitat.	Significant and unavoidable
*LOSS OF NUTTALL'S WOODPECKER (*PICOIDES NUTTALLII*) AND FORAGING AND NESTING HABITAT*	Implementation of Mitigation Measures **BIO12 through BIO16** (described above) should adequately mitigate project-related impacts to Cooper's Hawk, except for incremental loss of habitat.	Significant and unavoidable
*LOSS OF SAN DIEGO DESERT WOODRAT (*NEOTOMA LEPIDA INTERMEDIA*) AND HABITAT*	Implementation of Mitigation Measures **BIO11, BIO13, BIO15, and BIO16** will provide some mitigation for potential losses of San Diego Desert Woodrat individuals and provide compensation for some lost habitat; however, the loss of 40.39 acres of occupied or potential habitat (Coastal Sage Scrub) onsite would not be fully mitigated to a less-than-significant level.	Significant and Unavoidable
LOSS OF SPECIAL-STATUS REPTILES POTENTIALLY PRESENT	**BIO17** **Conduct Focused Surveys.** Prior to grading, focused surveys shall be conducted on the proposed development site for special-status reptile species that have a high potential to occur onsite. The surveys results shall be submitted within 45 days after completion of the last survey to the CDFG and DRP for concurrence. If it is determined that special-status wildlife species are not present on the proposed development site, then no further mitigation is necessary. **BIO18** **Implement Relocation Program.** If Silvery Legless Lizard, Coastal Western Whiptail, Rosy Boa, San Diego Banded Gecko, San Diego Horned Lizard, and/or Coast Patch-nosed Snake (the six special-status reptile species that are likely to occur onsite) is/are found onsite, then a capture and relocation program shall be implemented. Prior to implementation of the relocation program, the program and the biologist(s) implementing the program shall be subject to approval of the CDFG and the County Biologist. A relocation program shall be prepared to include a detailed methodology for locating, capturing, and relocating individuals prior to construction. The program shall identify a suitable location for relocation of each species prior to capture. A qualified biologist with the necessary permits (if required by CDFG) shall be required for handling the specific special-status wildlife species. The adopted relocation program shall be implemented. **BIO19** **Control Argentine Ants.** The control of Argentine Ant from the project site is necessary to prevent the loss of forage resources for the San Diego Horned Lizard, which cannot survive on consumption of Argentine Ant. The landscaping plan, within 300 feet of any natural areas containing San Diego Horned Lizard, shall be designed to utilize native plant species that do not require supplemental irrigation in an attempt to keep invading Argentine Ant populations as low as possible. In addition, an Argentine Ant control plan shall be developed and implemented in perpetuity by the homeowners association or other responsible party. Implementing Mitigation Measures **BIO13, BIO15, and BIO16** will also mitigate for this impact.	The significance after mitigation would be *potentially significant and unavoidable* because 118.74 acres of suitable habitat will be permanently lost onsite (including the loss of 98.86 acres resulting from direct grading impacts and the loss of an additional 19.88 acres resulting from indirect fuel modification impacts). In addition, the control of Argentine Ant is very difficult in areas adjacent to urban landscaping.
LOSS OF SPECIAL-STATUS BIRD SPECIES POTENTIALLY PRESENT	Implementation of Mitigation Measures **BIO12 through BIO16** (described above) should adequately mitigate project-related impacts to the ten special-status bird species that are likely to occur onsite, except for incremental loss of habitat.	Potentially Significant and Unavoidable

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
*DISTURBANCE TO MOUNTAIN LION (*PUMA CONCOLOR*) AND LOSS OF HABITAT*	Implementation of Mitigation Measures **BIO11, BIO13, BIO15, and BIO16** (described above) should adequately mitigate project-related impacts to Mountain Lion, except for incremental loss of habitat. Additional mitigation may be required if individuals are found onsite.	Potentially Significant and Unavoidable
*DISTURBANCE TO RING-TAILED CAT (*BASSARISCUS ASTUTUS*) AND LOSS OF HABITAT*	Implementation of Mitigation Measures **BIO11, BIO13, BIO15, and BIO16** (described above) should adequately mitigate project-related impacts to Ring-tailed Cat, except for incremental loss of habitat. Additional mitigation may be required if individuals are found onsite.	Potentially Significant and Unavoidable
*DISTURBANCE TO WESTERN MASTIFF BAT (*EUMOPS PEROTIS CALIFORNICUS*) AND LOSS OF HABITAT*	Implementation of Mitigation Measures **BIO11, BIO13, BIO15, and BIO16** (described above) should provide sufficient mitigation for potential losses of Western Mastiff Bat individuals and provide partial compensation for lost habitat. Additional mitigation may be required if individuals are found onsite. **BIO20** **Install Bat Boxes.** If the Western Mastiff Bat, or other special-status bat species, is found to forage or nest onsite, then bat boxes shall be installed at appropriate locations within preserved land onsite to replace lost nesting habitat. A mitigation plan designed specifically to provide nesting and foraging habitat for special-status bat species shall be prepared and submitted to CDFG and the County Biologist for approval, and after approval, it shall be implemented.	Less Than Significant
IMPACTS RELATED TO NOISE	Recommended mitigation measures to reduce construction noise impacts on sensitive wildlife cover three basic actions: equipping equipment with mufflers, scheduling noisy work in less sensitive areas to minimize impact, and using noise attenuation structures/barriers to reduce noise levels locally. Implement Mitigation Measure **BIO13 and BIO14** of this Biological Resources section of this EIR, as well as Mitigation Measures **N1** through **N9** in the Noise section of this EIR to mitigate for indirect impacts to special-status wildlife species. Implementing Mitigation Measure **BIO2** will also mitigate for this impact.	The significance after mitigation for temporary construction impacts is *less than significant.* The impacts of noise after completion of grading would be *potentially adverse but less than significant.*
IMPACTS RELATED TO HUMAN ACTIVITY	**BIO21** **Install Perimeter Fencing.** Perimeter fencing at houses onsite adjacent to open space areas shall be designed to prevent dogs from accessing open space areas onsite, and keep wildlife from entering yards and homes as much as feasible. Details of acceptable fencing materials will be included in the project CC&Rs. Implementing Mitigation Measure **BIO2** will also mitigate for this impact.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
IMPACTS RELATED TO NIGHT LIGHTING	**BIO22** **County Review of Project Plans.** Prior to issuance of building permits, the County of Los Angeles shall ensure that the following elements are included in all project plans, as appropriate: • All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Motion detectors, low-intensity street lighting, and low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site areas; • Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways; • Fixtures and standards shall conform to state and local safety and illumination requirements; • All trail and park lighting shall provide optimum public safety, while at the same time reducing nighttime light spillover and glare; • Development projects shall use minimally reflective glass and all other materials used on exterior building and structures shall be selected to minimize reflective glare; and • Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy. These measures would partially mitigate for adverse impacts of landscaping nuisance lighting impacting wildlife in adjacent open space areas of the project site. In addition: **BIO23** **Hooded Outdoor Lighting.** Require all street and outdoor lighting to be hooded to direct away from, or prevent light from entering, open space areas of the project site. Light intensity should be set as low as possible while meeting the primary objective of the outdoor lighting. Implementing Mitigation Measure **BIO2** will also mitigate for this impact.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF GRASSLAND HABITAT	**BIO24** **Protect and Enhance Grassland.** The loss of 29.53 acres of Grassland vegetation shall be mitigated by enhancing at an acreage rate of 1.5 acres for each acre lost (1.5:1 replacement ratio), equaling 44.29 acres of required mitigation. Prior to implementation of any restoration, a detailed program shall be developed by the project applicant for review and approval by DRP and shall contain the following items: *Responsibilities and Qualifications Specified.* The responsibilities of the landowner, technical specialists, and maintenance personnel that shall supervise and implement the restoration plan shall be specified. *Protect Grassland Preserved Onsite.* The project shall preserve 8.43 acres of Grassland onsite in perpetuity by a legal instrument. *Enhance Degraded Grassland Preserved Onsite.* Habitat enhancement of the required 44.29 acres of Grassland will include eradicating invasive exotics from the remaining Grassland onsite. The areas of Grassland, from which invasive species will be eradicated, will be planted with supplemental native Grassland grasses and herbs. This will increase native groundlayer cover to match desired cover levels, and increase dominance by native species. Approximately 8.43 acres of Grassland vegetation will be avoided by the proposed project; however, the Grassland onsite is contaminated with invasive exotic plant species in varying amounts. Enhancement of up to 8.43 acres of degraded Grassland habitat onsite will mitigate for 19% of the area needed, based on the 1.5:1 enhancement ratio. An additional 35.86 acres would need to be preserved and enhanced, for a total of 44.29 acres of Grassland enhanced and protected. The lack of reasonable availability (the offsite component) may render this mitigation measure at least partially infeasible. *Mitigation Site Selection.* The site for the mitigation shall be determined in coordination with the project applicant and resource agencies. The site shall be located on the proposed development site in a dedicated open space area or dedicated open space area shall be purchased offsite. Appropriate sites shall have suitable hydrology and soils for the establishment of target native species. *Site Preparation and Planting Implementation*. A seasonal survey shall be conducted in suitable habitat after the flowering season to collect seeds from the native grasses and wildflowers inhabitaing Grassland habitats onsite. The survey shall be conducted by a qualified botanist acceptable to DRP and familiar with the flora of the Santa Susana Mountains. Seeds shall be collected when ripe, cleaned, and stored by a qualified nursery or institution with appropriate storage facilities, and transferred to a native plant nursery experienced with propagating native herbaceous grassland species species and grown out to 1-gallon container size plantings. The site preparation shall include: protection of existing native species; trash and weed removal; native species salvage and reuse (i.e. duff); soil treatments (i.e., imprinting, decompacting); temporary irrigation installation; erosion control measures (i.e., rice or willow wattles); seed mix application; and container plantings. The best time to sow seed is in the fall in conjunction with the onset of rain. These native annual and perennial grass and herb plantings shall be planted in suitable preserved habitat onsite. The propagated plants shall be maintained and monitored for a period of five (5) years after initial planting, with annual reports submitted to the County. Mitigation Measure **BIO1** will aid in planting implementation.	With the implementation of mitigation measure **BIO24**, this impact would be *less than significant*. If offsite acquisition of mitigation land proves infeasible, the permanent loss of 35.86 (unmitigable) acres of Grassland onsite would be considered a *significant* impact.

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF GRASSLAND HABITAT (CONTINUED)	• *Schedule*. A schedule shall be developed which includes planting to occur in late fall and early winter between October 1 and January 30. • *Maintenance Plan/Guidelines*. The maintenance plan shall include: weed control; herbivore control; trash removal; irrigation system maintenance; maintenance training; and replacement planting. • *Mitigation and Monitoring Plan.* A detailed mitigation plan shall be submitted for approval to the County prior to project implementation. The mitigation plan shall include specifics regarding grassland enhancement, planting details, timing, and monitoring proposed for grassland mitigation. The monitoring plan shall include: qualitative monitoring (i.e. photographs and general observations); quantitative monitoring (e.g. randomly placed transects); performance criteria as approved by the resource agencies; monthly reports for the first year and bimonthly thereafter; and annual reports for five years that shall be submitted to the resource agencies. The site shall be monitored and maintained for five years to ensure successful establishment of Grassland habitat within the restored and created areas. • *Long-term Preservation.* Long-term preservation of the site shall also be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development. An appropriate legal instrument over the area to be preserved shall be recorded prior to implementation of site grading to ensure protection in perpetuity. • *Earth-moving Equipment.* Earth-moving equipment shall avoid maneuvering in any area identified as natural open space areas. Prior to grading, the open space limits shall be marked by the construction supervisor and the project biologist. These limits shall be identified on the grading plan. • Implementing Mitigation Measure **BIO1 and BIO2** will also mitigate for this impact.	If mitigation measure **BIO24** is implemented, then the impact would be *less than significant*. If offsite acquisition of mitigation land proves infeasible, the permanent loss of 35.86 (unmitigable) acres of Grassland onsite would be considered a *significant* impact.
LOSS OF LICHEN-ROCK OUTCROP HABITAT	No feasible mitigation is available other than avoidance.	Potentially Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF COASTAL SAGE SCRUB	**BIO25** **Protect and Enhance Coastal Sage Scrub.** The loss of 40.39 acres of Coastal Sage Scrub vegetation shall be mitigated by enhancing at an acreage rate of 1.5 acres for each acre lost (1.5:1 replacement ratio), equaling 60.58 acres of required mitigation. Prior to implementation of any restoration, a detailed program prior to issuance of a grading permit shall be developed by the project applicant and shall contain the following items: • *Responsibilities and Qualifications Specified.* The responsibilities of the landowner, technical specialists, and maintenance personnel that shall supervise and implement the restoration plan shall be specified. • *Protect Coastal Sage Scrub Preserved Onsite.* The project shall preserve 17.04 acres of Coastal Sage Scrub onsite in perpetuity by a legal instrument. • *Enhance Degraded Coastal Sage Scrub Preserved Onsite.* Habitat enhancement of the required 60.58 acres of Coastal Sage Scrub will include eradicating invasive exotics from the remaining Coastal Sage Scrub onsite. The areas of Coastal Sage Scrub, from which invasive species will be eradicated, will be planted with supplemental Coastal Sage Scrub species. This would increase native shrub canopy cover to match desired cover levels, and increase dominance by native species. Approximately 17.04 acres of Coastal Sage Scrub vegetation will be avoided by the proposed project; however, the Coastal Sage Scrub onsite is contaminated with invasive exotic plant species in varying amounts. Specifically, of the 17.04 acres avoided, 7.6 acres of Coastal Sage Scrub vegetation is highly infested with invasive exotic plants (*Salvia leucophylla-Brassica* Alliance). Enhancement of up to 17.04 acres of degraded Coastal Sage Scrub habitat onsite will mitigate for 28% of the area needed, based on the 1.5:1 enhancement ratio. An additional 43.54 acres would need to be preserved and enhanced, for a total of 60.58 acres of Coastal Sage Scrub enhanced and protected. The lack of reasonable availability (the offsite component) may render this mitigation measure at least partially infeasible. • Exhibit 5.6-22, Potential Habitat Mitigation Areas, shows the locations of remaining Coastal Sage Scrub patches available for implementing the mitigation measures required for impacts to Coastal Sage Scrub habitat. • *Mitigation Site Selection*. The site for the mitigation shall be determined in coordination with the project applicant and the lead and resource agencies. The site shall be located on the proposed development site in a dedicated open space area or dedicated open space area shall be purchased offsite. Appropriate sites shall have suitable hydrology and soils for the establishment of target native species. • *Site Preparation and Planting Implementation*. The site preparation shall include: protection of existing native species; trash and weed removal; native species salvage and reuse (i.e. duff); soil treatments (i.e., imprinting, decompacting); temporary irrigation installation; erosion control measures (i.e., rice or willow wattles); seed mix application; and container species. Mitigation Measure **BIO1** will aid in planting implementation.	With implementation of mitigation measure **BIO25**, then the impact will be *less than significant*. If offsite acquisition of mitigation land proves infeasible, the permanent loss of 43.54 (unmitigable) acres of Coastal Sage Scrub onsite would be considered a *significant* impact.

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF COASTAL SAGE SCRUB (CONTINUED)	• *Schedule and Maintenence*. A schedule shall be developed which includes planting to occur in late fall and early winter between October 1 and January 30. The maintenance plan shall include: weed control; herbivore control; trash removal; irrigation system maintenance; maintenance training; and replacement planting. • *Mitiation and Monitoring Plan.* A detailed mitigation plan shall be submitted for approval to the County prior to project implementation. The mitigation plan shall include specifics regarding grassland enhancement, planting details, timing, and monitoring proposed for Coastal Sage Scrub mitigation. The monitoring plan shall include: qualitative monitoring (i.e. photographs and general observations); quantitative monitoring (e.g. randomly placed transects); performance criteria as approved by the resource agencies; monthly reports for the first year and bimonthly thereafter; and annual reports for five years that shall be submitted to the resource agencies. The site shall be monitored and maintained for five years to ensure successful establishment of Coastal Sage Scrub habitat within the restored and created areas. • *Long-term Preservation.* Long-term preservation of the site shall also be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future development. An appropriate legal instrument over the area to be preserved shall be recorded prior to implementation of site grading to ensure protection in perpetuity. • *Earth-moving Equipment.* Earth-moving equipment shall avoid maneuvering in any area identified as natural open space areas. Prior to grading, the open space limits shall be marked by the construction supervisor and the project biologist. These limits shall be identified on the grading plan. Implementing Mitigation Measure **BIO1 and BIO2** will also mitigate for this impact.	
LOSS OF CHAPARRAL HABITAT	No feasible mitigation is available other than avoidance.	Significant
LOSS OF SOUTHERN CALIFORNIA BLACK WALNUT WOODLAND	Implementing Mitigation Measure **BIO4** for loss of *Juglans californica* var. *californica* individuals onsite will mitigate for the loss of 0.50 acre of *Juglans californica* Alliance onsite as well. Implementing Mitigation Measures **BIO1 and BIO2** will also mitigate for this impact. Exhibit 5.6-22, Potential Habitat Mitigation Areas, shows the locations of possible mitigation sites available for implementing the mitigation measures required for impacts to *Juglans californica* var. *californica* and Walnut Woodland.	Less Than Significant

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF COAST LIVE OAK TREES, VALLEY OAK TREES, SCRUB OAKS, AND OAK WOODLANDS	**BIO26** **Preserve and Protect Avoided Onsite Oak Trees**. The 1,168 oak trees to be avoided by the proposed project shall be protected onsite in perpetuity by establishing onsite preserves that are permanently protected from future development and managed for conservation purposes. Management of the preserved trees shall be minimal, focused on facilitating the natural growth and condition of the protected trees and associated habitat. Prior to the issuance of a grading permit, the applicant shall have prepared an oak resource management plan to be reviewed and approved by the DRP and County Forester. Only oak trees and oak resource habitat not in private lots will be credited as preserved habitat. **AND** **BIO27** **Plant 15-gallon Young Oaks Onsite.** To mitigate for the loss of 162, and the encroachment of 54, mature oak trees by the proposed project, young oak trees of all three species impacted shall be planted at a 2:1 ratio for non-heritage trees impacted, and at a 10:1 ratio for heritage trees impacted, per the County Oak Tree Ordinance replacement criteria. Specifically, to mitigate for impacted non-heritage oak trees, an overall mitigation ratio of two 15-gallon oaks shall be planted for each tree impacted. To mitigate for impacted heritage oak trees, an overall mitigation ratio of ten 15-gallon oaks shall be planted for each tree impacted. Therefore, at a 2:1 ratio, 298 15-gallon young oak individuals (including 282 *Q. agrifolia*, 4 *Q. berberidifolia*, and 12 *Q. lobata*) would be required for mitigation for the impacts to 216 *non-heritage* oak trees (including 162 non-heritage lost and 54 non-heritage encroached) onsite. In addition, 130 15-gallon young oak individuals (all *Q. agrifolia*) would be required for mitigation for the impacts to 19 *heritage* oak trees (including 13 heritage lost and 6 heritage encroached) onsite. A total of 428 15-gallon oaks will be required to mitigate for impacts to 216 oak trees, including 19 heritage trees. No existing sensitive habitat shall be impacted as a result of any planting activities. The planted trees shall be maintained and monitored for a period of seven (7) years after planting. Success of this mitigation measure will be achieved if 100 percent of the acorns or seedlings survive after 7 years. Implementation of **BIO1** should also mitigate for impacts to oak species and woodland onsite. **Contribute Funds to the Oak Species Forest Fund**. If the success criteria for this mitigation measure are not met, the Applicant shall contribute to the Oak Species Forest Fund. The compensation rate shall be set at 50 percent of the assessed economic value of the trees lost, less the estimated economic value of the trees successfully covered under Mitigation Measures **BIO26** and **BIO27**. The economic value of the 164 oak trees to be lost is approximately $4,211,730. In addition, the economic value of the 54 trees to be encroached is approximately $2,125,400, totaling $6,337,130 (including $4,090,830 for 154 *Q. agrifolia* lost; $1,865,700 for 49 *Q. agrifolia* encroached, $12,000 for 2 *Q. berberidifolia* lost, $90,900 for 6 *Q. lobata* lost, and $252,600 for *Q. lobata* encroached). **Transplant Selected Mature Oak Trees Onsite**. As part of the proposed project, the applicant proposes to transplant several mature and heritage oak trees, that will be impacted from the project, to onsite open areas and landscaped areas. Even though transplanting mature oak trees is expensive and may have a low success rate, the Applicant desires to transplant selected mature oak trees to potentially help mitigate the loss of oak habitat. A detailed transplantation plan shall be developed by a qualified arborist and submitted to the County for approval. Maintenance and monitoring of all transplanted oak trees shall be required for a period of ten (10) years after transplantation. No sensitive habitat shall be impacted as a result of any transplanting activities.	Significant. The temporal loss of habitat function cannot be mitigated until all planted Coast Live Oak, Valley Oak, and Scrub Oak trees reach maturity.

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF COAST LIVE OAK TREES, VALLEY OAK TREES, SCRUB OAKS, AND OAK WOODLANDS (CONT.)	**AND** **BIO28** **Plant Acorns or Oak Seedlings Onsite**. To mitigate for the loss of 162, and the encroachment of 54, mature oak trees by the proposed project, sprouted oak acorns seedlings of the species impacted shall be planted in appropriate ratios. To mitigate for impacted oak trees, an overall mitigation ratio of 5 seedlings planted for each tree impacted (a 5:1 replacement ratio) shall be implemented. Therefore, 1,080 container seedlings would be required for mitigation for the impacts to 216 oak trees onsite. The planted seedlings shall be maintained and monitored for a period of seven (7) years after planting. Success of this mitigation measure will be achieved if 75 percent of the acorns or seedlings survive after 7 years. Implementation of **BIO1** should also mitigate for impacts to oak species and woodland onsite. **AND** **BIO29** **Replace Oak Woodland Habitat Onsite**. Oak woodland impacts are estimated at 8.82 (including 7.87 acres of upland Coast Live Oak Woodland impacted, 0.92 acres of Coast Live Oak Riparian Woodland impacted, and 0.03 acre of Valley Oak Woodland impacted), Oak woodland habitat will be replaced onsite at a 2:1 ratio within preserved portions of the project site, or at an offsite location. The oak woodland habitat will partially be replaced with the implementation of Mitigation Measures **BIO26 through BIO28**. Based on the 2:1 ratio, a total of 16.4 acres of oak woodland shall be created onsite, offsite, or a combination of onsite and offsite locations. The oak woodland habitat shall be monitored and maintained for a period of seven (7) years. **AND** **BIO30** **Landscape Irrigation Out of Oak Driplines.** Landscaping requiring irrigation shall not be planted within the dripline of oaks due to the susceptibility of native oaks to root rot caused by excessive unseasonable irrigation. The design and installation of landscape irrigation systems outside the dripline of the oaks shall be such that the area within the dripline is not wetted during operation of the system. In addition, surface runoff from impermeable surfaces shall be directed away from oaks; where natural topography has been altered, provisions shall be made for drainage away from trunks of oaks so that water shall not pond or collect within the dripline of any oak. If any existing oak tree are damaged or impacted by the affects of irrigation of mitigation plantings, additional plantings shall be implemented as replacement. Implementing Mitigation Measure **BIO1 and BIO2** will also mitigate for this impact.	See Above

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF SENSITIVE WETLAND PLANT COMMUNITIES	**BIO31** **Implement Best Management Practices (BMPs) During Construction In/Near Wetlands to Minimize Impacts**. Impacts to riparian habitat shall be minimized to the maximum extent possible by implementing the following BMPs: • Construction equipment shall only cut back or cut down riparian habitat that is absolutely necessary for construction equipment access; • All construction activities, within the banks of Lyon Creek and tributaries, should be conducted during seasons of no, or minimal, channel flows (summer/early fall); • A path through the creek channel shall be selected that minimizes impacts to the existing riparian vegetation; • A fence shall be placed around any (mature) trees, which are less efficiently replaced by mitigation/restoration efforts; • All active wildlife nests existing within the project site riparian vegetation shall be protected and avoided by construction equipment; and • A biological monitor shall be present during all construction activities within or adjacent to the drainages of Lyon Canyon that are not to be impacted. **BIO32** **Protect Existing Wetlands Onsite**. 6.85 acres of existing wetlands, not to be impacted by the proposed project, shall be protected in perpetuity through a prohibition from any development. The wetland preserve area(s) shall be clearly marked with signs, and a public education program shall be developed for future residences of the project site and visitors. **BIO33** **Enhance Existing Disturbed Wetlands Onsite**. Existing wetlands not impacted by the proposed project currently are degraded by past activities on the project site (e.g. road crossings, fill, culverts, berms, dumping, invasion by exotic plants). A 1/3 credit shall be allowed for every acre of existing protected wetland habitat that is enhanced onsite and shall be credited towards the 10.20 acres required for mitigation. Therefore, 1/3 of the protected 10.20 acres equals 3.37 acres to be enhanced. Enhancement activities shall include: removing all foreign materials from wetland areas; eradicating and controlling invasive exotic plant species; and planting native riparian plant species in disturbed areas. Nearly all the wetland areas onsite are currently in a degraded condition, to varying degrees, and are available for habitat enhancement. Approximately 10.20 acres is required for mitigation based on the 2:1 ratio. The 10.20 acres of required mitigation area minus the 3.37 acres of enhanced wetlands habitat equals 6.83 acres of mitigation that is still required to be created. Since the County will not permit riparian mitigation within the detention basins onsite, the applicant shall be required to implement one of the following measures: (1) make a payment to an in-lieu fee mitigation program; (2) contribute to a mitigation bank; or (3) create offsite mitigation for 6.83 acres of remaining required mitigation after enhancement of 3.37 acres onsite (totaling the required 10.20 acres based on the 2:1 mitigation ratio).	Since no areas exist onsite to create 6.83 additional acres of wetlands (the creation of wetlands within the detention basins onsite will not be permitted), the level of significance after mitigation would be *significant and unavoidable*.

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF SENSITIVE WETLAND PLANT COMMUNITIES (CONT.)	**BIO34** **Prepare Disturbed Wetland Areas for Replanting**. After efforts to minimize the impacts to the riparian vegetation are implemented, appropriate areas of the project site shall be restored, and lost habitat mitigated. This shall be accomplished by implementing the following mitigation measures: • Regrading portions of the drainages to accommodate onsite revegetation and to accomplish natural sinuosity of the creek channel; • Replacing and planting selected portions of the site with indigenous riparian plant species; • Maintaining and irrigating the restored area; • Removing invasive exotic plants, such as *Centaurea melitensis* (Tocalote), and replacing them with native species to increase species diversity and habitat function; and • Monitoring the site for at least five (5) years after restoration plantings have been completed.	See Above
IMPACTS ON WATER QUALITY	Implementation of the mitigation measures presented in the Hydrology and Water Quality section of this EIR (Mitigation Measure Numbers **HWQ1 through HWQ14**) will mitigate impacts to water quality onsite.	Less Than Significant
LOSS OF WILDLIFE FORAGING AND COVER HABITATS	Implementation of the project will result in the loss of approximately 118.74 acres of natural vegetation of the project site, which serves as foraging, cover and nesting habitat for many species in the vicinity of the property. Implementing Mitigation Measures **BIO24 through BIO35** (for restoring natural habitats, including sensitive habitats) will minimize impacts to areas occupied by the foraging and cover habitats required by wildlife species of the project site. Implementing Mitigation Measures **BIO1, BIO2, and BIO4** will also help mitigate for this impact.	Significant and Unavoidable
IMPACTS OF FUEL MODIFICATION	Impacts from fuel modification should be mitigated by the implementation of the mitigation measures listed above under Impacts to Natural Vegetation, Including Sensitive Habitats (including **BIO24 through BIO35**). Implementing Mitigation Measures **BIO2 and BIO7** will also mitigate for this impact.	Significant
IMPACTS FROM LANDSCAPING	Implementation of Mitigation Measures **BIO7, BIO8 and BIO9** will mitigate for this impact.	Less Than Significant
IMPACTS TO SEA INTEGRITY	Implementation of all the above mitigation measures presented in the Impacts to Biological Life History subsection - including plants, special-status plants, wildlife, special-status wildlife, natural plant communities, and sensitive habitats – should partially mitigate for impacts to components of the SEA integrity onsite. However, an unavoidable loss of a portion of SEA 63 will result.	Significant and Unavoidable
IMPACTS TO NATURAL OPEN AREAS	Implementation of all the above mitigation measures presented in the Impacts to Biological Life History subsection - including plants, special-status plants, wildlife, special-status wildlife, natural plant communities, and sensitive habitats – should partially mitigate for impacts to natural open space. However, an unavoidable loss of natural open space will result. **BIO36** **Open Area Protection and Management Plan.** In addition to Biological Life History mitigation measures presented above, an open area protection and management plan, for all preserve areas designated onsite, shall be prepared to ensure the implementation by HOA of the mitigation and to aid in the protection of the remaining preserved open areas after the development onsite.	Significant and Unavoidable

Biological Resources		
Impact	**Mitigation Measures**	**Residual Impact**
LOSS OF WILDLIFE TRAVEL ROUTES ONSITE	Implementation of the following mitigation measures (presented above) would partially mitigate local impacts to wildlife travel routes onsite: **BIO1** (Seasonal survey, gather and grow in preserved habitat, and maintain/monitor), and **BIO2** (for implementing conditions of approval related to preserve maintenance), and **BIO13 through BIO16** (for impacts to special-status wildlife species), and **BIO21 through BIO23** (for indirect impacts to special-status wildlife species), as well as **N1 through N9** (for impacts from noise, provided in the Noise section of this EIR), and **BIO24 through BIO35** (for restoring natural vegetation, including sensitive habitats). In addition, lighting and enlarging proposed culverts resulting from the project development will help to mitigate for impacts to wildlife movement. No additional mitigation measures are required.	Significant
INTERFERENCE WITH WILDLIFE CORRIDORS WITHIN LYON CANYON	Implementation of the following mitigation measures (presented above) would mitigate impacts to wildlife corridors within Lyon Canyon: **BIO1** (Seasonal survey, gather and grow in preserved habitat, and maintain and monitor), and **BIO2** (for implementing conditions of approval related to preserve maintenance), and **BIO13 through BIO16** (for impacts to special-status wildlife species), and **BIO21 through BIO23** (for indirect impacts to special-status wildlife species), as well as **N1 through N9** (for impacts from noise, provided in the Noise section of this EIR), and **BIO24 through BIO35** (for restoring natural vegetation, including sensitive habitats). In addition, the proposed dim lighting and enlarged culverts to be implemented with the project development will help to mitigate for impacts to wildlife movement. A culvert/tunnel will be constructed over Lyon Canyon Creek to accommodate animal movement through the remaining habitats onsite and beyond. No additional mitigation measures are required.	Less Than Significant

Cultural Resources		
Impact	**Mitigation Measures**	**Residual Impact**
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO ADVERSELY AFFECT THE SIGNIFICANCE OF HISTORIC RESOURCES ON, OR IN THE VICINITY OF, THE PROJECT SITE.	No mitigation measures are required.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO ADVERSELY AFFECT THE SIGNIFICANCE OF ARCHAEOLOGICAL RESOURCES AT THE PROJECT SITE.	**CR1.** A pre-grade meeting shall be conducted in which the project archaeologist shall explain the procedures necessary to protect and safely remove potentially significant cultural materials. **CR2.** A cultural resource monitoring program shall be instituted during the initial vegetation clearance and soil disturbance for the project. The purpose of this monitoring program is to determine if any significant deposits not identified during the Phase I survey exist within the project boundary. The monitoring shall be limited to the initial vegetation clearance phase of the grading program. If cultural deposits meeting the significance criteria defined in Public Resources Code Section 21083.2(g) are encountered, limited data recovery shall be conducted consistent with present financial and research limitations established in CEQA Guidelines. Native Americans shall be actively involved in the monitoring and any subsequent phases of the project mitigation program. Participation shall include monitoring of archaeological investigations, construction monitoring, and data analysis. The County shall retain control over the selection and participation of Native Americans in any program required for the project.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO ADVERSELY AFFECT THE SIGNIFICANCE OF UNDISCOVERED HUMAN REMAINS AT THE PROJECT SITE.	**CR3.** If human remains are discovered during grading activities, the Los Angeles County Coroner's Office shall be notified immediately, per state law, and all activities in the immediate area shall cease, until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are Native American, the NAHC shall also be contacted. The NAHC shall designate a Most Likely Descendent (MLD) who will make recommendations concerning the disposition of the remains in consultation with the property owner and project archaeologist.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD HAVE THE POTENTIAL TO ADVERSELY AFFECT THE SIGNIFICANCE OF PALEONTOLOGICAL RESOURCES AT THE PROJECT SITE	**CR4.** A pre-grade meeting shall be conducted in which the project paleontologist shall explain the procedures necessary to protect and safely remove potentially significant fossil materials for study and curation at the NHMLAC. **CR5.** Monitoring of grading activities shall be conducted and shall include periodic screening of sediment samples to identify potential microfossil materials. Sediment samples may be removed in bulk and screened off-site to minimize interference with grading operations. The monitoring program shall be directed by a qualified paleontologist and shall consist of the recovery, preparation (to a point of identification), and cataloguing of fossil materials. **CR6.** Fossil beds impacted by the proposed project should be excavated by a qualified paleontologist to gather and record which species of vertebrate and macroinvertebrate fauna existed onsite during the Pliocene. The fossil record should be preserved in an appropriate museum, such as the Natural History Museum of Los Angeles County, and the results published for the benefit of the scientific community and general public.	Less Than Significant

Impact	Mitigation Measures	Residual Impact
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO CULTURAL RESOURCES.	Refer to mitigation measures CR1 through CR6. No additional mitigation measures are required.	Less Than Significant
Mineral Resources		
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD RESULT IN THE LOSS OF AVAILABILITY OF KNOWN MINERAL RESOURCES OR A LOCALLY IMPORTANT MINERAL RESOURCE RECOVERY SITE.	No mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVE IMPACTS TO ON- AND OFF-SITE MINERAL RESOURCES AND MINERAL RESOURCE RECOVERY AREAS	No mitigation measures are required.	Less Than Significant

Aesthetics		
Impact	**Mitigation Measures**	**Residual Impact**
THE PROPOSED PROJECT WOULD RESULT IN GRADING AND CONSTRUCTION ACTIVITIES THAT WOULD TEMPORARILY ALTER THE EXISTING VISUAL CHARACTER/QUALITY OF THE PROJECT SITE	**AES1.** Construction equipment staging areas shall be located a minimum of 500 feet from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), shall be used to buffer views of construction equipment and material, when feasible. Staging location shall be indicated on project Final Development Plans and Grading Plans. **AES2.** All construction-related lighting shall be located and aimed away from adjacent residential areas and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit applications for the subdivision of the lots. **AES3.** The project biologist shall review the construction staging and construction safety lighting plans and determine the most appropriate location for the staging of construction equipment and construction lighting so that impacts to wildlife are minimized. The project biologist shall provide written certification of his/her approval of these plans to the County of Los Angeles Biologist prior to issuance of a grading permit.	Less Than Significant
THE PROPOSED PROJECT WOULD HAVE A SUBSTANTIAL EFFECT ON A SENIC VISTA AND PERMANENTL Y ALTER THE EXISTING VISUAL CHARACTER AND VIEWSHED FROM SURROUNDING LOCATIONS.	No mitigation measures are recommended that could feasibly reduce the significant impacts referenced.	Significant and Unavoidable
*THE PROPOSED PROJECT MAY SUBSTANTIALLY DEGRADE SCENIC RESOURCES, INCLUDING BUT NOT LIMITED TO, PRIMARY/SECONDARY RIDGELINES, TREES, AND ROCK OUTCROPPINGS***.**	**AES4.** The project applicant/developer/builder shall prepare and implement a Landscape Plan that provides planting and maintenance guidance for common landscaped areas, slopes, and undeveloped building pads. The project applicant/developer/builder shall be responsible for the Plan's implementation until such time as a homeowners' association is prepared to take over landscape maintenance responsibilities. The Landscape Plan shall be subject to the review and approval by the Los Angeles County Departments of Public Works and Regional Planning, prior to issuance of the grading permit. To ensure its implementation, the Landscape Plan shall be incorporated into the project's Conditions, Covenants, and Restrictions (CC&Rs) to be recorded prior to final map recordation.	Significant and Unavoidable

Impact	Mitigation Measures	Residual Impact
THE PROPOSED PROJECT WOULD INTRODUCE NEW SOURCES OF LIGHT/GLARE INTO THE PROJECT AREA.	**AES5.** Prior to issuance of building permits, the County of Los Angeles shall ensure that the following elements are included in all project plans, as appropriate: ♦ All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary to prevent spill lighting on adjacent off-site uses; ♦ Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways; ♦ Fixtures and standards shall conform to state and local safety and illumination requirements; ♦ All trail and park lighting shall provide optimum public safety, while at the same time reducing nighttime light spillover and glare; ♦ Development projects shall use minimally reflective glass and all other materials used on exterior building and structures shall be selected with attention to minimizing reflective glare; and ♦ Automatic timers on all lighting fixtures within any on-site recreational structures shall included in the building design to maximize personal safety during nighttime use while saving energy and reducing light pollution. The timers shall be set so that structure lighting within common areas is turned off at 10:00 PM.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT, IN CONJUNCTION WITH RELATED PROJECTS IN THE CITY OF SANTA CLARITA, WOULD RESULT IN SIGNIFICANT CUMULATIVE AESTHETIC AND VISUAL RESOURCES IMPACTS.	No mitigation measures are recommended that could feasibly reduce the impacts referenced to the less than significant level.	Significant and Unavoidable

Traffic		
Impact	**Mitigation Measures**	**Residual Impact**
IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF TRAFFIC SYSTEM INTERSECTIONS AND ROADWAY SEGMENTS IN THE PROJECT AREA.	**T1**. The improvements summarized below shall be implemented to address project site-specific traffic impacts at the following locations: **Roadway Improvements** a) <u>The Old Road</u> The Old Road shall be improved to include four travel lanes and a center turn-lane/median along the project frontage. Appropriate roadway transitions south of the project site shall also be constructed by the developer pursuant to the Los Angeles County Department of Public Works roadway design standards. Project Share – 100% **Intersection Improvements** a) <u>The Old Road & "A" Street</u> The developer shall improve the above referenced intersection to include the following lane specifications: Northbound: 1 Left-turn Lane, 2 Through Lanes Southbound: 1 Through Lane, 1 Shared Through/Right-turn Lane Eastbound: 1 Left-turn Lane, 1 Right-turn Lane Project Share – 100% b) <u>The Old Road & "E" Street</u> The developer shall improve the above referenced intersection to include the following lane specifications: Northbound: 2 Through Lanes (left-turns prohibited) Southbound:1 Through Lane, 1 Shared Through/Right-turn Lane Eastbound: 1 Right-turn Lane (left-turns prohibited) Project Share – 100% **T2.** The improvements summarized below shall be implemented to address off-site traffic impacts. Please note that these mitigation measures are required to address cumulative traffic impacts. Thus, the project developer shall be responsible for providing its "fair-share" contribution towards ultimate implementation of the following roadway improvements: **Freeway On/Off Ramp Intersections** a) I-5 SB Ramps/Marriott & Pico Cyn. Rd. Add 3rd Eastbound Through Lane, and convert Westbound Right-turn Lane to 3rd Westbound Through Lane (striping) Project Share – 4.1% b) <u>I-5 NB Ramps and Lyons Ave</u> Add 2nd Eastbound Left-turn lane (striping) Project Share – 14.3%	Less Than Significant

Impact	Mitigation Measures	Residual Impact
IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF TRAFFIC SYSTEM INTERSECTIONS AND ROADWAY SEGMENTS IN THE PROJECT AREA.(CONT.)	c) I-5 SB Ramps & Calgrove Blvd Add 2nd Eastbound Through Lane, and Add 2nd Westbound Through Lane (striping) Install Traffic Signal Project Share – 25.5% d) I-5 NB Ramps and Calgrove Blvd Add 2nd Eastbound Through Lane, and Add 2nd Westbound Through Lane (striping) Install Traffic Signal Project Share – 33.8% e) The Old Road & Pico Cyn Rd Convert Eastbound Right-turn Lane to 3rd Eastbound Through Lane (striping) Project Share – 3.4% f) Marriot Way and The Old Road Install Traffic Signal Project Share – 95.2% g) Chiquella Lane and The Old Road Add Southbound Right-turn Lane (striping) Install Traffic Signal Project Share – 93.3%	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM (cmp) INTERSECTIONS AND ROADWAY SEGMENTS IN THE PROJECT AREA.	No mitigation is required	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF PUBLIC TRANSIT SERVICES IN THE PROJECT AREA.	No mitigation is required	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT, IN CONJUNCTION WITH RELATED PROJECTS IN THE COUNTY OF LOS ANGELES AND THE CITY OF SANTA CLARITA, WOULD NOT RESULT IN SIGNIFICANT CUMULATIVE TRAFFIC AND CIRCULATION IMPACTS.	Refer to mitigation measures T1 through T2 above.	Less Than Significant

Water and Wastewater		
Impact	**Mitigation Measures**	**Residual Impact**
IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE ADVERSE IMPACTS ON WATER TREATMENT AND DISTRIBUTION FACILITIES IN THE PROJECT AREA.	No mitigation measures are required.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE DEMAND FOR WATER THAT EXCEEDS AVAILABLE SUPPLIES.	No mitigation measures are required.	Less Than Significant
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD GENERATE WASTEWATER THAT COULD EXCEED THE CAPACITY OF CONVEYANCE AND TREATMENT FACILITIES THAT SERVE THE PROJECT AREA.	**WW1.** The Los Angeles County Sanitation Districts shall review and approve both the points of connection and quantification of the available capacity in the affected portions of the sewer system serving any project proposed within the SCVSD service area boundary.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED PROJECTS WOULD INCREASE DEMAND FOR WATER SUPPLIES.	No mitigation measures are required	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED PROJECTS WOULD INCREASE DEMAND FOR WASTEWATER CONVEYANCE AND TREATMENT CAPACITY.	Refer to Mitigation Measure WW1. No additional mitigation measures are required.	Less Than Significant

Schools		
Impact	**Mitigation Measures**	**Residual Impact**
PROJECT IMPLEMENTATION WOULD INCREASE STUDENT ENROLLMENT WITHIN THE NEWHALL SCHOOL DISTRICT.	**SE1.** Project participation in a mitigation agreement with the Newhall District fully mitigates project specific impacts on this district. This agreement would provide full funding of the costs to construct new facilities necessary to house the additional students generated by the project.	Less Than Significant
PROJECT IMPLEMENTATION WOULD INCREASE STUDENT ENROLLMENT WITHIN THE HART DISTRICT	**SE2.** Project participation in the fair share mitigation agreement with the Hart District fully mitigates project specific impacts on this district. This agreement would provide full funding of the costs to construct new facilities necessary to house the additional students generated by the project.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED PROJECTS WOULD INCREASE THE DEMAND FOR SCHOOL FACILITIES WITHIN THE NEWHALL AND HART SCHOOL DISTRICTS	Refer to Mitigation Measures SE1 and SE2. No additional mitigation is required.	Less Than Significant

Fire Services		
Impact	**Mitigation Measures**	**Residual Impact**
CONSTRUCTION OF THE PROPOSED PROJECT WOULD RESULT IN AN INCREASED DEMAND FOR FIRE SERVICES.	**FS1.** All proposed development on the site must comply with applicable state and County code and ordinance requirements for fire protection. **FS2.** Prior to the issuance of a certificate of occupancy, the project applicant shall dedicate to the Los Angeles County Fire Department, a 1.26 acre fire station site at the northeast corner of the proposed project. The fire station site must be constructed and dedicated to the Los Angeles County Fire Department in accordance with the provisions of the AGREEMENT BETWEEN THE CONSOLIDATED FIRE PROTECTION DISTRICT OF LOS ANGELES COUNTY AND WESTERN PACIFIC HOUSING – LYONS CANYON PARTNERS, LLC. Please refer to Appendix P of this Draft EIR for the full text of this agreement. **FS3.** The project shall prepare a Fuel Modification Plan (which includes a landscape plan and irrigation plan) as required for projects located within a Very High Fire Hazard Severity Zone. The Fuel Modification Plan shall be submitted and approved by the County Fire Department and the Department of Regional Planning prior to issuance of grading permit. The Fuel Modification Plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision. The fuel modification plan shall not conflict with the revegetation plan as directed in Section 5.6, *Biological Resources*. **FS4.** Brush clearance shall be conducted prior to initiation of construction activities in accordance with Los Angeles County Fire Department requirements. **FS5.** Adequate access to all buildings on the project site shall be provided for emergency vehicles during the building construction process. **FS6.** Adequate water availability shall be provided to service construction activities.	Less Than Significant

Fire Services		
Impact	**Mitigation Measures**	**Residual Impact**
OPERATIONS OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR FIRE SERVICES.	***General*** **FS7.** The project shall comply with the Los Angeles County Fire Department Development standards with respect to access roadways, building orientation, brush clearance, fire flows,	Less Than Significant
DEVELOPMENT OF THE PROPOSED PROJECT COULD INCREASE WILDLAND FIRE HAZARDS.	Refer to Mitigation Measures FS1 through FS7.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREASE DEMANDS FOR FIRE PROTECTION SERVICES IN THE SANTA CLARITA VALLEY	No mitigation measures are required.	Less Than Significant
Sheriff Services		
Impact	**Mitigation Measures**	**Residual Impact**
CONSTRUCTION OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR SHERIFF SERVICES	**SS1.** During construction, private security patrols shall be utilized to protect the project site.	Less Than Significant
OPERATIONS OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR SHERIFF SERVICES.	**SS2.** As final building plans are submitted to the County for approval in the future, Sheriff's Department design requirements which reduce demands for service and ensure adequate public safety (such as those pertaining to site access, site security lighting), shall be incorporated into building designs. **SS3.** Project design shall landscape the project site with low-growing groundcover and shade trees, rather than a predominance of shrubs which could conceal potential criminal activity around buildings and parking areas. **SS4.** Project design shall provide lighting, to the satisfaction of the Sheriff's Department, around and throughout the development to enhance crime prevention and enforcement efforts. **SS5.** Project design shall provide clearly visible (during the day and night) address signs and/or building numbers for easy identification during emergencies. **SS6.** Project design shall provide visibility of doors and windows from the street and between buildings.	Less Than Significant
OPERATIONS OF THE PROPOSED PROJECT COULD IMPACT COUNTY EMERGENCY RESPONSE/EVACUATION PLAN	No mitigation measures are required	Less Than Significant
OPERATIONS OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR CALIFORNIA HIGHWAY PATROL SERVICES.	No mitigation measures are required.	Less Than Significant

Sheriff Services		
Impact	**Mitigation Measures**	**Residual Impact**
DEVELOPMENT OF THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREASE DEMANDS FOR POLICE PROTECTION SERVICES IN THE SANTA CLARITA VALLEY	Refer to Mitigation Measures SS1 through SS6. No other mitigation measures are required.	Significant and Unavoidable
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS COULD IMPACT COUNTY EMERGENCY RESPONSE/EVACUATION PLANS.	No mitigation measures are available.	Significant and Unavoidable
Solid Waste		
Impact	**Mitigation Measures**	**Residual Impact**
CONSTRUCTION OF THE PROPOSED PROJECT WOULD GENERATE SOLID WASTE, WHICH WOULD INCREMENTALLY DECREASE THE CAPACITY AND LIFESPAN OF LANDFILLS.	**SW1.** The project applicant/individual project applications shall adhere to all source reduction programs for the disposal of construction materials and solid waste, as required by the County of Los Angeles. Prior to issuance of building permits, a source reduction program shall be prepared and submitted to the Director of Public Works for each future structure constructed on the subject properties to achieve a minimum 50 percent reduction in waste disposal rates, including green waste.	Less Than Significant
OPERATION OF THE PROPOSED PROJECT WOULD GENERATE SOLID WASTE, WHICH WOULD INCREMENTALLY DECREASE THE CAPACITY AND LIFESPAN OF LANDFILLS.	**SW2.** The location of recycling/separation areas shall be in close proximity to dumpsters for non-recyclables, elevators, loading docks, and primary internal and external access points. **SW3.** The location of recycling/separation areas shall not be in conflict with any applicable federal, state or local laws relating to fire, building, access, transportation, circulation, or safety. **SW4.** The location of recycling/separation areas shall be convenient for those persons who deposit, collect, and load the recyclable materials. **SW5.** Recycling containers/bins shall be located so that they do not block access to each other. **SW6.** Yard waste shall be reduced through the use of drought-tolerant and native vegetation in common area landscaping wherever possible. **Residential** **SW7.** Kitchen, garage or garden design shall accommodate trash and recyclable components to assist in the City's recycling efforts. **SW8.** Property buyers shall receive educational material on the City's waste management efforts. **SW9.** The applicant shall comply with all applicable state and Los Angeles County regulations and procedures for the use, collection and disposal of solid and hazardous wastes.	Significant and Unavoidable
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREASE THE DEMAND FOR LANDFILL DISPOSAL CAPACITY.	Refer to Mitigation Measures SW1 through SW9. No additional mitigation measures are required.	Significant and Unavoidable

Electricity		
Impact	**Mitigation Measures**	**Residual Impact**
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD INCREMENTALLY INCREASE DEMANDS ON ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE	No mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREMENTALLY INCREASE DEMANDS ON ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE.	No mitigation measures are required.	Less Than Significant
Natural Gas		
Impact	**Mitigation Measures**	**Residual Impact**
IMPLEMENTATION OF THE PROPOSED PROJECT WOULD INCREMENTALLY INCREASE DEMANDS ON NATURAL GAS SUPPLIES AND DISTRIBUTION INFRASTRUCTURE	No mitigation measures are required.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREMENTALLY INCREASE DEMANDS ON NATURAL GAS SUPPLIES AND DISTRIBUTION INFRASTRUCTURE.	No mitigation measures are required	Less Than Significant
Library		
Impact	**Mitigation Measures**	**Residual Impact**
DEVELOPMENT OF THE PROPOSED PROJECT WOULD INCREASE DEMAND ON LIBRARY SERVICES PROVIDED IN THE SANTA CLARITA VALLEY, THEREBY INCREASING THE EXISTING NEED FOR ADDITIONAL FACILITIES AND BOOKS.	**LIB1.** The project applicant shall pay the standard Los Angeles County Library mitigation fee of $665 per dwelling unit, or other amount determined to be appropriate by the County of Los Angeles Public Library.	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREASE DEMANDS FOR LIBRARY SERVICES AND MATERIALS IN THE SANTA CLARITA VALLEY.	Refer to Mitigation Measure LIB1. No additional mitigation is required.	Less Than Significant

Parks and Recreation		
Impact	**Mitigation Measures**	**Residual Impact**
DEVELOPMENT OF THE PROPOSED PROJECT WOULD INCREASE USAGE OF NEIGHBORHOOD AND COMMUNITY PARKS.	**PR1.** The project shall comply with the County Ordinance and/or Quimby Act by paying the in-lieu fees totaling $364,931 to the County of Los Angeles.	Less Than Significant
DEVELOPMENT OF THE PROPOSED PROJECT WOULD INCREASE USAGE OF REGIONAL PARKS.	No mitigation measures are required.	Less Than Significant
DEVELOPMENT OF THE PROPOSED PROJECT WOULD INCREASE USAGE OF STATE AND FEDERAL RECREATION/FORESTS.	No mitigation measures are required	Less Than Significant
DEVELOPMENT OF THE PROPOSED PROJECT WOULD INCREASE USAGE OF LOCAL TRAILS.	No mitigation measures are required	Less Than Significant
DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREASE DEMANDS FOR PARKS AND RECREATIONAL FACILITIES IN THE SANTA CLARITA VALLEY.	Refer to Mitigation Measure PR1. No additional mitigation is required.	Less Than Significant