

Environmental Checklist Form (Initial Study)
County of Los Angeles, Department of Regional Planning



Project Title: PM069664/ RCUP200800198, RENV200800136

Lead agency name and address: Los Angeles County - 320 West Temple Street, Los Angeles, CA 91020

Contact Person and phone number: Robert Sims/Land Design Consultants – 199 South Los Robles Avenue, suite 250, Pasadena, CA 91101

Project sponsor's name and address: Norman & Patricia Howell, 30701 Sloan Canyon Road, Castaic, CA 91384

Project Location: Southwest of intersection of Burlwood Drive and Hasley Canyon Road, Castaic

APN: 3247-052-002 **Thomas Guide:** 4459-A1 **USGS Quad:** Val Verde

Gross Acreage: 10 gross acres; 9.5 net acres

Description of project: The project is a request for the subdivision of a 10-acre parcel into two 5-acre lots for the development of two new single-family residences and associated improvements (grading, driveways, and septic system). Lot 1 depicts a 28,731 square foot building pad served by an approximately 550-foot long, 20-foot wide driveway off of Burlwood Drive which is a private and future street with 24 feet of paving. Lot 2 depicts a 21,976 square-foot split building pad accessed by an approximately 250-foot long, 20-foot wide driveway off of Hasley Canyon Road, a public street with 24 feet of paving. The anticipated grading quantities associated with development are 27,500 cubic yards of cut and 26,000 cubic yards of fill (approximately 53,500 cubic yards of earth work) which will be balanced on site. The applicant is not proposing any export or import of earth in connection with the project. The 1,500 cubic yard difference of earth between the cut and fill is due to shrinkage during the grading process. There are 13 oak trees on site but none will be removed or encroached upon as a result of the proposed development. The development of the site will require septic systems to be installed, and potable water will be provided by Los Angeles County Waterworks District 36, a public water service provider. The subject property and Burlwood Drive, a private and future street, are part of a recorded subdivision (Project No. 83200, Tract Map No. 34170) which created 11 single family lots on 118 acres. Conditional Use Permit No. 200800198 is required to ensure compliance with Hillside Management design criteria. Approximately 4.2 acres of the 10-acre project site have a slope of 25 percent or less; approximately 4.6 acres have a slope of greater than 25 percent but less than 50 percent; and approximately 1.1 acres have a slope of greater than 50 percent. The driveways will not exceed 15 percent slope. This development will provide more than 70 percent of open space.

General plan designation: N/A

Community/Area wide Plan designation: Santa Clarita Valley Area Plan HM (Hillside Management), N1 (Non-Urban 1 – 0.5 dwelling units per acre), and W (Floodway/Floodplain).

Zoning: A-2-2 (Heavy Agricultural – Two Acres Minimum Required Lot Area); Castaic Area Community Standard District (CSD).

Surrounding land uses and setting: The 10-acre site is a vacant parcel located in the rural northwestern area of Los Angeles County. The property is characterized as a hillside, with some steep slopes that exceed

50 percent. The property has 13 oak tree sparsely located on the mid and northern portion of the site. Access to the property is provided to Lot 1 from a driveway off Burlwood Drive and to Lot 2 from a driveway off Hasley Canyon Road. The surrounding land uses consist of vacant land and some large single-family residences to the north. The closest residence is located approximately 170 feet to the north of the subject property. The Approximately 57 percent of the Project site contains slopes steeper than 25 percent.

Major projects in the area:

<i>Project/Case No.</i>	<i>Description and Status</i>
<u>PM069961/PM069961</u>	<u>To create 4 single-family lots on 80.6 acres. Located approximately 1,000 feet north of the Project site. Tentative parcel Map is pending.</u>
<u>03-332/PM060646</u>	<u>To create 4 single-family lots on 13.17 acres. Located approximately 150 feet northeast of the Project site. Approved in September, 2006.</u>
<u>TR53725</u>	<u>To create 42 single family lots and 1 open space lot on 142.56 acres. Located approximately 300 feet south of the Project site. Tentative tract map is recommended for denial due to inactivity (May 1st, 2012). Tentative Tract Map is pending.</u>

Public agency approvals which may be required:

<i>Public Agency</i>	<i>Approval Required</i>
_____	_____
_____	_____

Reviewing Agencies:

Responsible Agencies

- None
- Regional Water Quality Control Board:
 - Los Angeles Region
 - Lahontan Region
- Coastal Commission
- Army Corps of Engineers
- AQMD

Trustee Agencies

- None
- State Dept. of Fish and Game
- State Dept. of Parks and Recreation
- State Lands Commission
- University of California (Natural Land and Water Reserves System)
- US Fish & Wildlife Service

Special Reviewing Agencies

- None
- Santa Monica Mountains Conservancy
- National Parks
- National Forest
- Edwards Air Force Base
- Resource Conservation District of Santa Monica Mountains Area
- Castaic Town Council

County Reviewing Agencies

- DPW:
 - Land Development Division (Grading & Drainage)
 - Geotechnical & Materials Engineering Division
 - Watershed Management Division (NPDES)
 - Traffic and Lighting Division
 - Environmental Programs Division
 - Waterworks Division
 - Sewer Maintenance Division

Regional Significance

- None
- SCAG Criteria
- Air Quality
- Water Resources
- Santa Monica Mtns. Area
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- Fire Department
 - Forestry, Environmental Division
 - Planning Division
- Sanitation District
- Public Health: Environmental Hygiene (Noise)
- Sheriff Department
- Parks and Recreation
- Subdivision Committee
-

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

IMPACT ANALYSIS SUMMARY MATRIX		No Impact				
		Less than Significant Impact				
		Less than Significant Impact w/ Project Mitigation				
		Potentially Significant Impact				
Environmental Factor	Pg.					<i>Potential Concern</i>
1. Aesthetics		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Agriculture/Forest		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Air Quality		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Emissions during site construction (PM10 and PM2.5)</i>
4. Biological Resources		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Impacts to slender Mariposa Lily and Peirson's Morning Glory</i>
5. Cultural Resources		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Energy		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Geology/Soils		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Greenhouse Gas Emissions		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Hazards/Hazardous Materials		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Hydrology/Water Quality		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Land Use/Planning		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Mineral Resources		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Noise		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Population/Housing		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Public Services		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. Recreation		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Transportation/Traffic		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Utilities/Services		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19. Mandatory Findings of Significance		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

The environmental factors checked below would be potentially affected by this project.

- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Agriculture/Forest | <input type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Services |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings
of Significance |
| <input type="checkbox"/> Geology/Soils | | |

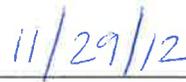
DETERMINATION: (To be completed by the Lead Department.)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



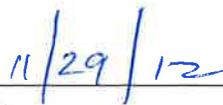
Signature (Prepared by)



Date



Signature (Approved by)



Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significance. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.
- 8) Climate Change Impacts: When determining whether a project's impacts are significant, the analysis should consider, when relevant, the effects of future climate change on : 1) worsening hazardous conditions that pose risks to the project's inhabitants and structures (e.g., floods and wildfires), and 2) worsening the project's impacts on the environment (e.g., impacts on special status species and public health).

1. AESTHETICS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p>Would the project:</p> <p>a) Have a substantial adverse effect on a scenic vista, including County-designated scenic resources areas (scenic highways as shown on the Scenic Highway Element, scenic corridors, scenic hillsides, and scenic ridgelines)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed residential development of the property will result in the development of two pads for the construction of two single-family residences and site improvements. The Project site is not located adjacent to or in close proximity to any designated or eligible scenic highway that could have views of the site. The Project site is located adjacent to Hasley Canyon Road which is an arterial street and not a scenic highway. The closest ridgeline to the property boundary is approximately 1,900 feet to the southwest. Therefore, the project does not adversely affect a scenic vista (Source: Project Plans, Scenic Highway Element of the General Plan, Santa Monica Mountains North Area Community Standards District).

<p>b) Be visible from or obstruct views from a regional riding or hiking trail?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The closest County Regional riding or hiking trail to the Project site is the Fish Canyon Trail located approximately 4,900 feet east of the Project site. The Project site is not visible from the Fish Canyon Trail and will not obstruct or impact views from this trail or any other trail.

<p>c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, historic buildings, or undeveloped or undisturbed areas?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project site is comprised of undeveloped land, with partially disturbed areas with access roads and trails. The project includes 27,500 cubic yards of cut and 26,000 cubic yards of fill grading which will be balanced on site for the construction of two pads for the proposed single-family homes and driveway access. There are 13 oak trees on site but none will be impacted. No historic buildings exist on site. Overall, the proposed single-family houses and associated improvements would result in less than significant aesthetic impacts (Source: Site visit, Site plan).

<p>d) Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The project site is comprised of undeveloped land, with partially disturbed areas consisting of access roads and trails. The project proposes the construction of two driveways to provide access for building two pads with a total area of 50,707 square feet. Approximately 80 percent of the project site will remain as open space.

<p>e) Create a new source of substantial shadows, light,</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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or glare which would adversely affect day or nighttime views in the area?

The Project proposes the subdivision of one parcel into two single-family lots which implies that two single-family houses will be constructed at later date and be subject to County review to ensure consistency with applicable County lighting and building standard/requirements, which limits the height of structures and the intensity, type and direction of external lighting in the property. Therefore, the Project will not be a source of substantial shadow, light or glare which would adversely affect day or nighttime views of the area.

2. AGRICULTURE / FOREST

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p>Would the project:</p> <p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Approximately seven percent of the project site is comprised of Grazing Land and the remainder is Other Land. All the improvements depicted in the property as part of this project is located out of the Grazing Land area. Therefore, construction of the residential improvements will not result in the conversion of Prime Farmland, Unique Farmland or Farmland (Source: Farmland Mapping and Monitoring Program, California Department of Conservation).

<p>b) Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The project site is zoned Heavy Agricultural, two acre minimum lot size (A-2-2). However the site is not currently used for agricultural purposes and it is not designated as Agricultural Opportunity Area or is not under a Williamson Act contract.

<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)) or timberland zoned Timberland Production (as defined in Public Resources Code § 4526)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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There is no forest land or timberland zoned Timberland Production in the Project site.

<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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There is no forest land in the Project site.

<p>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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There is no forest land or Farmland in the Project site.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

<p>a) Conflict with or obstruct implementation of applicable air quality plans of the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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The Project is comprised of the subdivision of a 10-acre parcel into two single-family residential lots and it is located within the Antelope Valley AQMD (AVAQMD). The project is comprised of two single-family lots. The closest residence is located approximately 170 feet (80 meters) north of the subject property line, facing Hasley Canyon Road. The calculations of the proposed project’s emission impacts using the current California Emission Estimator Model (CalEEMod) (Appendix) demonstrate that the construction emissions are less than significant with mitigation measures. The mitigation measures (MA-1) will reduce PM10 and PM2.5 during grading activities to less than significant. Therefore, the project is not expected to conflict with or obstruct implementation of the applicable AVAQMD air quality plan.

MA-1: Dust control measures for Project construction activities shall be in compliance with SCAQMD Rule 403 for Best Available Control Measures and to the satisfaction of SCAQMD and the County Department of Regional Planning. Contractor compliance with Rule 403 requirements shall be mandated in the contractor’s final construction plans and specifications and shall include the following measures:

- Land disturbance shall be minimized to the extent feasible. Grading activities shall be limited to the disturbance of no more than 1.25 acres per day and shall not exceed 2,400 cubic yards of grading per day.
- Haul trucks shall be covered when loaded with fill.
- Paved streets shall be swept at least once per day where there is evidence of dirt that has been carried onto the roadway.
- Watering trucks shall be used to minimize dust. Watering should be sufficient to confine dust plumes to the Project work areas. Active disturbed areas shall have water applied to them three times daily.
- For disturbed surfaces to be left inactive for four or more days and that will not be revegetated, a chemical stabilizer shall be applied per manufacturer’s instruction.
- For unpaved roads, chemical stabilizers shall be applied or the roads shall be watered once per hour during active operation.
- Vehicle speed on unpaved roads shall be limited to 15 miles per hour.
- For open storage piles that will remain on site for two or more days, water shall be applied once per hour, or coverings shall be installed.
- For paved road track-out, all haul vehicles shall be covered, or shall comply with vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads. During high wind conditions (wind speeds in excess of 25 mph), all earth-moving activities shall cease or water shall be applied to soil not more than 15 minutes prior to disturbing such soil.

b) Violate any applicable federal or state air quality standard or contribute substantially to an existing or projected air quality violation (i.e. exceed the State's criteria for regional significance which is generally (a) 500 dwelling units for residential uses or (b) 40 gross acres, 650,000 square feet of floor area or 1,000 employees for nonresidential uses)?

The Project is comprised of the subdivision of a 10-acre parcel into two single-family residential lots and will not violate any applicable federal or state air quality standard or projected air quality violation.

c) Exceed a South Coast AQMD or Antelope Valley AQMD CEQA significance threshold?

The Project is comprised of the subdivision of a 10-acre parcel into two single-family residential lots. The calculations of the proposed project's emission impacts using the current California Emission Estimator Model (CalEEMod) (Appendix) demonstrate that the construction emissions are less than significant with mitigation measures. The mitigation measures (MA-1) will reduce PM10 and PM2.5 during grading activities to less than significant. With mitigation measures, the air emissions that will be generated by the Project, both during construction and operations will not exceed the South Coast AQMD or Antelope Valley AQMD CEQA significance threshold.

d) Otherwise result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The project would not result in a cumulatively considerable net increase of non-attainment criteria pollutants. The emissions from construction and operations, individually or cumulatively, will not exceed SCAQMD Air Quality Significance Thresholds.

e) Expose sensitive receptors (e.g., schools, hospitals, parks) to substantial pollutant concentrations due to location near a freeway or heavy industrial use?

The Project is not considered a sensitive land use. The closest freeway to the site is the 5 Freeway, which is approximately 3.4 miles to the east. The Project site is surrounded by Heavy Agricultural zoning and the closest Industrial land use is located 2.3 miles to the southeast.

f) Create objectionable odors affecting a substantial number of people?

The single-family homes will not generate any obnoxious odors, dust or other hazardous air emissions that exceed adopted thresholds or emission limits. Project construction may increase the amount of dust in the air. However, standard dust control measures as stipulated by State of California Health and Safety Code – Section 40506 (Air Quality Management District Permit) will be employed which will ensure that any air quality impacts remain insignificant. In addition, this area is very low density and the surrounding properties to the east, west and south are currently vacant. Residences are located to the north of the property, separated by Hasley Canyon Road. Upon completion of the construction of the project, there will be no significant dust or air pollution generated.

4. BIOLOGICAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (DFG) or U.S. Fish and Wildlife Service (USFWS)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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The Project site is dominated by chamise chaparral, coastal sage scrub, and non-native/disturbed plant communities. The central section of the site is occupied by coastal sage scrub. The property is divided by a north-south trending hill that runs through the majority of the site. The east-facing slope has been more recently disturbed than the west-facing slope and therefore supports a different sub-dominant plant community. Sub dominant communities include species such as black mustard, Mexican elderberry, beavertail cactus, among others. The west-facing slope has received less recent disturbance and therefore is characterized by more dense stands of California sage brush and toyon. According to the biological report (Appendix), on April 24 and June 1, 2010 special-status plant tsurveys were conducted at the study area to determine the potential presence or absence of several species (see full list in the biological report) including, slender mariposa lily, Peirson’s morning-glory, Slender-horned spineflower and San Fernando Valley spineflower. According to the surveys, two special-status plant species, peirson’s morning glory and slender mariposa lily (California native Plant Society – CNPS) were detected on the Project site. Peirson’s morning glory was detected within annual grassland in the northernmost portion of the site, east of an unpaved access road. Slender mariposa lily was detected within openings in coastal sage scrub habitat along the ridge in the central portion of the Project site. Peirson’s morning glory and mariposa lilies have been transplanted with varying degrees of success. Therefore, with recommended mitigation measures (MM-1) to transplant these species, the impact to these species would be less than significant. Due to lack of suitable habitat elements on site, the Slender-horned spineflower is discounted from further consideration of potential presence. Slender-horned spineflower usually are restricted to alluvial terraces along river and stream floodplains and no such habitat exists on site. Despite negative survey results, Plummer’s mariposa lily, San Fernando Valley spineflower, and Ojai navarretia may be present in low numbers or within the seed bulk bank in on-site soils. Nevertheless, the fact that these species were not detected during the course of appropriately timed surveys suggests that further surveys are unwarranted, unless site conditions change so as to alter the factors favoring their growth (e.g. fire or mechanisms of vegetation removal). The site conditions remain unchanged since the survey was conducted in 2010.

MB-1: If the development of the Project site results in impacts to occupied habitat for Peirson’s morning-glory or slender mariposa lily, the following protocol shall be followed prior to the issuance of grading permits:

1. A survey shall be conducted in the spring prior to initiation of construction activities, and all affected Peirson’s morning-glory and slender mariposa lily individuals shall be marked in the field with flagging so that they may be located later in the year.
2. A five-year Habitat Mitigation and Monitoring Program (HMMP) shall be submitted for review and approval by the Department of Regional Planning. At a minimum, the HMMP shall include the

following components:

- a. an inventory of individuals identified in item 1 above that are to be impacted by project construction;
 - b. a map of impacted individuals and proposed transplantation locations within suitable habitat areas;
 - c. salvage and transplantation methodology meeting the requirements set forth in items 3 – 6 below;
 - d. performance standards by which the mitigation effort will be deemed a success; these will include the numbers of plants required to survive through the five-year monitoring period, the allowable abundance of non-native species within the transplantation areas, and other indicators of site sustainability such as control of access, erosion, and herbivory;
 - e. schedule of salvage, transplantation, maintenance, and reportage activities for the five-year period.
3. Subsequent to fruit maturation, flagged slender mariposa lilies shall be revisited so that their seeds may be harvested. Seeds shall be stored in a manner that encourages their preservation, such as in paper bags or envelopes, in a cool, dry, dark location. Fruit maturation typically occurs in late June – early July.
 4. Subsequent to plant dormancy and prior to the commencement of winter rains (typically from August – October), Pierson's morning-glory and slender mariposa lily individuals shall be transplanted.
 - a. Transplantation sites are to be excavated immediately prior to removal of salvaged plants.
 - b. Flagged individual plants to be salvaged shall be excavated and immediately transplanted. Excavation of mariposa lily bulbs must be implemented in a way that minimizes disturbance to the bulb and a large quantity of surrounding bulk soil (with due caution, a backhoe may be an effective means for the extraction of such large intact blocks of soil). Extracted soil and bulbs must be moved immediately to their transplantation locations. Pierson's morning-glory tubers are less sensitive and may be removed with shovels, but care must be taken not to injure the tubers during removal and relocation.
 5. Watering of transplanted plants is to be avoided, as unseasonal moisture encourages fungal and bacterial growth that is detrimental to the plants.
 6. Previously collected slender mariposa lily seeds shall be sown within the mitigation areas in order to augment the transplanted population(s).

The Project does not propose the removal or encroachment of any oak trees. However, to further prevent any damage to the trees, mitigation measure numbers 2 and 3 are recommended:

MB-2: A consulting arborist or a similarly qualified person shall be retained to maintain all the existing oak trees on the subject property during construction of the project. This person shall be identify all trees to be protected during construction activities and shall conduct a pre-construction meeting with the construction supervisor in order to review protective measures to be followed during project construction. The Los Angeles county Forester shall be advised of the pre-construction meeting and be offered the opportunity to attend.

MB-3: Temporary high-visibility fencing not less than four feet in height shall be installed to secure the protected zone of the oak trees on-site. The location and extent of fencing shall be determined at the pre-construction meeting with the retained arborist, the on-site project supervisor (and the Forester if present). The fencing shall be installed prior to grading and shall not be removed without approval of the Forester. The term "protected zone" refers to the area extending five feet beyond the dripline of the oak tree (before pruning), or 15 feet from the trunk, whichever is greater.

Among all the possible sensitive wildlife in the Project area, a northern harrier, a State Bird Species of Special Concern, a Southern CA rufous-crowned sparrow, and a Vaux's swift, State Watch List species, were

detected foraging over the property. No federally listed threatened or endangered bird species were found on or adjacent to the Project site.

MB-4: Proposed project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from March 1 – August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86), and includes take of eggs and/or young resulting from disturbances which cause abandonment of active nests.

If avoidance of the avian breeding season is not feasible, then beginning thirty days prior to the initiation of project activities, a qualified biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 500 feet of the disturbance area. The surveys shall continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of project activities. If an active nest is located, project activities shall be postponed within 300 feet of non-raptor nests and within 500 feet of raptor nests until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Highly visible flagging, stakes, or construction fencing shall be used to demarcate the boundary of the buffer between the project activities and the nest. Project personnel, including all contractors working on site, must be instructed on the sensitivity of the area. The project proponent must provide the Department of Regional Planning (DRP) staff biologist results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

If the biological monitor determines that a narrower buffer between the project activities and observed active nests is warranted, he/she shall submit a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) to the DRP staff biologist, and, upon request, the Department of Fish and Game (DFG). Based on the submitted information, DRP (and DFG, if requested) will determine whether to allow a narrower buffer.

The biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to the DRP staff biologist during the grubbing and clearing of vegetation, and shall notify DRP immediately if project activities damage active avian nests.

MB-5: If the coastal California gnatcatcher is found on-site during the pre-construction bird survey, the applicant shall cease all activities that would result in take (as defined in the Endangered Species Act of 1973) of the species until the appropriate level of consultation is reached with the U.S. Fish & Wildlife Service.

b) Have a substantial adverse effect on sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, and regulations DFG or USFWS? These communities include Significant Ecological Areas (SEAs) identified in the General Plan, SEA Buffer Areas, and Sensitive Environmental Resource Areas (SERAs) identified in the Coastal Zone Plan.

No Wildflower Reserve Areas are on the parcel. No oak trees of jurisdictional size (8 inches and larger DBH) are proposed for removal or encroachment of protected zone, so there is no conflict with Los Angeles County Oak Tree Ordinance.

g) Conflict with the provisions of an adopted state, regional, or local habitat conservation plan?

The project does not conflict with any adopted State, regional, or local Habitat Conservation Plan.

5. CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p>Would the project:</p> <p>a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No historical resource as defined in CEQA Guidelines § 15064.5 was observed on the project site and there is no record of such a resource on the project site.

<p>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No archaeological resource as defined in CEQA Guidelines § 15064.5, were observed on the subject property and there is no record of such a resource on the project site.

<p>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No paleontological resources or sites, unique geological features, or rock formations were observed on the subject property. However, the following condition of approval will be incorporated in to the project as a control measure in the event that cultural remains are found during project grading: Customary caution is advised in developing within the project area; Should unanticipated cultural resource remains be encountered during land modification activities, work must cease, and the Los Angeles County Director of Regional Planning contacted immediately to determine appropriate measures to mitigate adverse impact to the discovered resources; If human remains are discovered within the boundaries of the project area, then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed; These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission (NAHC) must be notified by telephone within 24 hours; Sections 5097.94 and 5097.98 of the Public Resources Code describes the procedures to be followed after the notification of the NAHC.

<p>d) Disturb any human remains, including those interred outside of formal cemeteries?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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There is no record of human remains on the project site. If human remains are discovered as a result of site disturbance, a condition of approval will be incorporated to ensure that the subdivider shall suspend construction in the vicinity of a cultural resource or human remains encountered during ground-disturbing activities at the site, and leave the resource or human remains in place until a qualified archaeologist can examine it and determine appropriate mitigation measures.

6. ENERGY

Would the project:	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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<p>a) Comply with Los Angeles County Green Building Standards?(L.A. County Code Title 22, Ch. 22.52, Part 20 and Title 21, § 21.24.440.)</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Project is subject to and will comply with the Los Angeles County Green Building Standards since it includes new buildings and a complete building permit application was not filed prior to 1/1/09.

<p>b) Involve the inefficient use of energy resources (see Appendix F of the CEQA Guidelines)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Appendix F, Section 1 of the CEQA Guidelines requires evaluations of energy efficiency only for Environmental Impact Reports. The environmental determination for this project is a mitigated negative declaration.

7. GEOLOGY AND SOILS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Be located in an active or potentially active fault zone, Seismic Hazards Zone, or Alquist-Priolo Earthquake Fault Zone, and expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault.

The Project site is located 5.6 miles west of the nearest fault zone and fault trace. Therefore, people or structures on the Project site will not be exposed to potential substantial adverse effects (Source: Alquist-Priolo Earthquake Fault Zoning Act; Southern California Seismic Hazard Map Data Access Page.)

ii) Strong seismic ground shaking?

The Project site is located 5.6 miles west of the nearest fault zone and fault trace. Therefore, people or structures on the Project site will not be exposed to potential substantial adverse effects (Source: Alquist-Priolo Earthquake Fault Zoning Act; Southern California Seismic Hazard Map Data Access Page; California Geology Website.)

iii) Seismic-related ground failure, including liquefaction?

The Project site contains approximately 2.6 acres located within the liquefaction zone, which is approximately 26 percent of the total Project area. The liquefaction zone is located mainly on the northern portion of the site, within Lot 1 (Source: Alquist-Priolo Earthquake Fault Zoning Act; Southern California Seismic Hazard Map Data Access Page; California Geology Website.) The Geologic and Geotechnical Engineering Report (2008) and Updated Report (2012) attached, analyze the Project site and conclude that the proposed Project will not be subject to significant or undue settlement due to liquefaction or lateral spreading.

iv) Landslides?

The Project site contains approximately 3.6 acres of landslide zone, which is approximately 26 percent of the total project area. The landslide zone is located mainly on the central and southern portions of the Project site, within Lot 2 (Source: Alquist-Priolo Earthquake Fault Zoning Act; Southern California Seismic Hazard Map Data Access Page; California Geology Website.) The Geologic and Geotechnical Engineering Report (1996) and Updated Report (2012) attached, the proposed grading and structures will not affect the geological stability of the site or adjacent properties.

b) Result in substantial soil erosion or the loss of topsoil?

The Geologic and Geotechnical Engineering Report (1996) and Updated Report (2012) attached, the proposed grading and structures will not affect the geological stability of the site or adjacent properties.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The Geologic and Geotechnical Engineering Report (1996) and Updated Report (2012) attached, the proposed grading and structures will not affect the geological stability of the site or adjacent properties.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The Geologic and Geotechnical Engineering Report (1996) and Updated Report (2012) attached, the proposed grading and structures will not affect the geological stability of the site or adjacent properties.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project proposes a septic tank. The Project Consult with the Department of Public Health and the Department of Public Works.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element?

The Project exceeds the 70 percent minimum open space required in a nonurban hillside management area. The project will be conditioned to comply with the Hillside Management Area Ordinance and the hillside design standards in the General Plan Conservation and Open Space Element.

Sources:

Preliminary Geologic and Soils Engineering Investigation, Liquefaction Study and Percolation Testing, Proposed Four-Lot Residential Subdivision, “Tentative Minor Land Division Map No. 69664”, APN 3247-052-002, Burwood Drive, Castaic, County of Los Angeles, California. Prepared by Southwest Geotechnical, Inc. June 27, 2008.

Response to County of Los Angeles Review Letters 1/12/09 (Geology) and 6/30/09 (Soils Engineering) Proposed Three-Lot Residential Subdivision, “Tentative Minor Land Division Map No. 69664”, APN 3247-052-002, Burwood Drive, Castaic, County of Los Angeles, California. Prepared by Southwest Geotechnical, Inc. October 20, 2009.

Geologic and Soils Engineering Update Report Proposed, Two-Lot Residential Subdivision, “Tentative Minor Land Division Map No. 69664”, APN 3247-052-002, Burwood Drive, Castaic, County of Los Angeles, California. Prepared by Southwest Geotechnical, Inc. February 16, 2012.

8. GREENHOUSE GAS EMISSIONS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Generate greenhouse gas (GhGs) emissions, either directly or indirectly, that may have a significant impact on the environment (i.e., on global climate change)? Normally, the significance of the impacts of a project’s GhG emissions should be evaluated as a cumulative impact rather than a project-specific impact.

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project is comprised of the subdivision of a 10-acre parcel into two single-family residential lots. Considering its small scale and requirements by the County’s Green Building Ordinance, it is not expected that the Project will generate GhGs that may have a significant impact on the environment.

b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases including regulations implementing AB 32 of 2006, General Plan policies and implementing actions for GhG emission reduction, and the Los Angeles Regional Climate Action Plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Project is comprised of the subdivision of a 10-acre parcel into two single-family residential lots. Considering its small scale, it is not expected that the Project will generate GhG’s that may have a significant impact on the environment. Therefore, the Project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GhGs.

9. HAZARDS AND HAZARDOUS MATERIALS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials or use of pressurized tanks on-site?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

The two-lot residential project does not include the routine transportation, storage, production, use, or disposal of hazardous materials, or the use of pressurized tanks. During the construction phase of the project, the project may include minimal use of hazardous materials, such as solvents, paints, lubricants, and oils, which will not create a significant hazard to the public or the environment.

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

The two-lot residential project does not include the release of hazardous materials or waste into the environment. During the construction phase of the project, the project may include minimal use of hazardous materials, such as solvents, paints, lubricants, and oils, which will not create a significant hazard to the public or the environment.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 500 feet of sensitive land uses (e.g., homes, schools, hospitals)?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Three residences are located within 500 feet radius from the Project site, across from Hasley Canyon Drive. The Project will not generate hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste. During the construction phase of the project, the project may include minimal use of hazardous materials, such as solvents, paints, lubricants, and oils, which will not jeopardize the three single family houses located within 500 feet of the Project site.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The project site is not included on the California Department of Toxic Substances Control EnviroStor database of clean-up sites and hazardous waste permitted facilities (<http://www.envirostor.dtsc.ca.gov/public/>)

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>e) For a project located within an airport land use</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. There are no public airports in the Castaic area.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The project site is not located within the vicinity of a private airstrip. The closest private airport is located in Agua Dulce, which is approximately 25 miles from the project site.

g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

The Project will not impair implementation of, or physically interfere, with an adopted emergency response plan or emergency evacuation plan.

h) Expose people or structures to a significant risk of loss, injury or death involving fires, because the project is located:

i) in a Very High Fire Hazard Severity Zones (Zone 4)?

The project site is located within a Very High Fire Hazard Severity Zone. The Fire Department has determined that the water system requirements for fire protection in each lot will be addressed during the architectural plan review prior to building permit issuance (Fire Department report dated August 23, 2011 – Attached)

ii) in a high fire hazard area with inadequate access?

The Project site plan depicts 20-foot wide private driveways and fire lanes on the two lots. The Fire Department has determined that access for the project is adequate.

iii) in an area with inadequate water and pressure to meet fire flow hazards?

The Fire Department has determined that the water system requirements for fire protection in each lot will be addressed during the architectural plan review prior to building permit issuance (Fire Department report dated August 23, 2011 – Attached)

iv) in proximity to land uses that have the potential for dangerous fire hazard (such as refineries, flammables, and explosives)

manufacturing)?

The project site is not located in proximity to land uses with a potential for dangerous fire hazard.

10. HYDROLOGY AND WATER QUALITY

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Project proposes a septic system and will be required to comply with the National Pollution Discharge Elimination System (“NPDES”).

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project will be served by Los Angeles County Waterworks District 36. The site does not influence the local groundwater basin nor serve as a groundwater recharge site (Calif. Water Quality Control Board, <http://geotracker.waterboards.ca.gov/gama/> Accessed on April 4, 2012).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project proposes the construction of two pads with access driveways. The drainage concept reviewed by Public Works shows no substantial erosion or siltation. The Project site does not contain a stream or river.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project will not substantially alter the existing drainage pattern of the site in a manner which would result in flooding on- or off-site. The Project proposes the construction of two pads with access driveways. The project site does not contain a stream or river.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The 10-acre Project site will remain with more than 70 percent open space. Two pads will be created to accommodate two single-family residences with a total of 50,707 square feet, which is approximately 12 percent of the total Project area. The site will not increase runoff because of minimal impervious area and the use of LID features to reduce runoff. The project conditions of approval will also required compliance with the Standard Urban Stormwater Management Plan (“SUSMP”).

f) Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?

The Project will require an estimated amount of grading of 27,500 cubic yards of cut and 26,000 cubic yards of fill which will be balanced on site. Conditions of approval will ensure that the proposed cross-lot drainage/grading of all parcels will be performed simultaneously prior to the sale of any individual parcels and that the Project complies with the requirements of the NPDES program related to construction runoff. In addition, offsite easements and permissions will be required to construct the private and future street along Burlwood Drive and the additional slope and drainage easement required to construct the private and future street.

g) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)?

The project will be required to comply with the Los Angeles County Low-Impact Development Ordinance as part of the Department of Public Works approval of the drainage plan.

h) Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance?

The project site is not located in the vicinity of a State Water Resources Control Board (“SWRCB”)-designated Area of Special Biological Significance identified on the SCRCB website, http://www.swrcb.ca.gov/water_issues/programs/ocean/asbs_areas.shtml

i) Use septic tanks or other private sewage disposal system in areas with known septic tank limitations or in close proximity to a drainage course?

The Project proposes one septic tank with leach lines in each lot. In Lot 1, the leach fields are located next to Burlwood Drive, just north of the driveway. For Lot 2, the leach fields are located next to Hasley Canyon Road, on both sides of the driveway and south of the trees. Both leach fields are not located close to the drainage course.

j) Otherwise substantially degrade water quality?

The drainage concept reviewed by Public Works does not indicate any factors which would substantially degrade water quality.

k) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or

Flood Insurance Rate Map, or within a floodway or floodplain?

The Project site is not within a 100-year flood hazard area as mapped by a Federal Emergency Management Agency (“FEMA”) Flood Insurance Rate Map (“FIRM”). However, the site does contain a flood hazard area shown on the parcel map, but the proposed project does not impact the flood hazard area. The flood hazard area is not an adopted flood zone or a FEMA zone.

- l) Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain?**

The Project site is not within a 100-year flood hazard area as mapped by a Federal Emergency Management Agency (“FEMA”) Flood Insurance Rate Map (“FIRM”).

- m) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

The project site is not within a 100-year flood hazard area as mapped by a FEMA FIRM.

- n) Place structures in areas subject to inundation by seiche, tsunami, or mudflow?**

The Project site is not in a flood zone and no levee is proposed.

11. LAND USE AND PLANNING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) **Physically divide an established community?**

The project is located in a low density residential rural area and will not physically divide an established community; the project will develop two new single-family residences on the project site, which currently is vacant.

b) **Be inconsistent with the plan designations of the subject property? Applicable plans include: the County General Plan, County specific plans, County local coastal plans, County area plans, County community/neighborhood plans, or Community Standards Districts.**

The proposed two single-family lot subdivision is located within the Santa Clarita Valley Area Plan and the Castaic Area Community Standard District (CSD). The Project's land use categories in the Santa Clarita Area Plan are HM (Hillside Management), N1 (Non-Urban 1 – 0.5 dwelling units per acre), and W (Floodway/Floodplain). The Project is consistent with the Community Design Element policy of the Santa Clarita Area Plan to carefully integrate physical development in rural areas into the natural environment settings (Policy 2.1, page 20.)

The Project is consistent with the CSD which is established to protect the rural character, unique appearance, and natural resources of the Castaic Area communities. The CSD also ensures that new development will be compatible with the Castaic area's existing rural neighborhoods and with the goals of the Santa Clarita Valley Area Plan.

c) **Be inconsistent with the zoning designation of the subject property?**

The property is zoned A-2-2 (Heavy Agriculture – Two Acres Minimum Required Lot Area). The proposed lot sizes (five acres each) are consistent with the two-acre minimum required lot area of the A-2-2 zone. The project proposes single-family lots; single-family residences are permitted by right in the A-2-2 zone. The project is also consistent with the Castaic Area CSD.

d) **Conflict with Hillside Management Criteria, SEA Conformance Criteria, or other applicable land use criteria?**

The project will not conflict with Hillside Management Criteria, as development of the undeveloped areas will be done in compliance with the Hillside Management Ordinance. This ordinance is intended to ensure, to the extent possible, that development maintains and, where possible, enhances the natural topography, resources and amenities of the hillside management areas, while allowing for limited controlled development therein. The proposed lots each provide a minimum of 70 percent open space as required by Hillside Management Ordinance. The project site is not within an SEA.

12. MINERAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<p>Would the project:</p> <p>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not result in the loss of availability of a known mineral resource, as the project site is not identified as a mineral resource area on the General Plan/Impact Analysis Related Special Management Areas map.

<p>b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The project would not result in the loss of availability of a locally-important mineral resource recovery site, as the project site is not identified as a mineral resource area on the General Plan/Impact Analysis Related Special Management Areas map.

13. NOISE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project result in:

a) Exposure of persons to, or generation of, noise levels in excess of standards established in the County noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08) or the General Plan Noise Element?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the County Noise Ordinance, the General Plan Noise Element, or the Community Plan Noise Element. The project site is not near a noise-generating site (airport, freeway, industrial site). The project will conform to the Title 12 Chapter 12.08 (“Noise Control Ordinance”) of the Los Angeles County Code, which provides a maximum exterior noise level of 45 decibels (dB) between 10:00 p.m. and 7:00 a.m. (nighttime) and 50 db from 7:00 a.m. to 10:00 p.m. (daytime) in Noise Zone II (residential areas). The project site will not create noise in excess of these limits, nor will residents of the project be exposed to noise in excess of these limits. The Noise Control Ordinance regulates construction noise and the hours of operation of mobile construction equipment. The Los Angeles County General Plan Noise Element provides no thresholds for noise.

b) Exposure of sensitive receptors (e.g., schools, hospitals, senior citizen facilities) to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project would not expose sensitive receptors or excessive noise levels. There are no schools, hospitals, or senior citizen facilities within 1,000 feet of the project site. The project will conform to the Title 12 Chapter 12.08 (Noise Control Ordinance) of the Los Angeles County Code. Section 12.08.390 of the County Code provides a maximum exterior noise level of 45 decibels (dB) between 10:00 p.m. and 7:00 a.m. (nighttime) and 50 dB from 7:00 a.m. to 10:00 p.m. (daytime) in Noise Zone II (residential areas).

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project would not result in a substantial permanent increase in ambient noise in the project vicinity above levels existing without the project, including noise from parking areas. The project proposes two single-family lots; no parking areas are proposed. Future single-family residences will have individual two-car garages.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The noise generated by construction equipment during the construction phase of the two-lot project will be

less than significant considering the scale of the project and the scarce populated area in which it is located. Construction activities will be conducted according to best management practices, including maintaining construction vehicles and equipment in good working order by using mufflers where applicable, limiting the hours of construction, and limiting the idle time of diesel engines. Noise from construction equipment will be limited by compliance with the Noise Control Ordinance. The project does not propose amplified sound systems.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project site is not located within an airport land use plan or within two miles of a public airport or public use airport.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The project site is not in the vicinity of a private airstrip.

14. POPULATION AND HOUSING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project would not induce substantial growth in the area. The project site is surrounded by single-family development at suburban densities. The project proposes two single-family lots. Lot 1 will have access from Burlwood Drive, which is a private and future street that dead ends on the Project site. Lot 2 will have access from Hasley canyon Road. This low density development is consistent with the type of development existing in this area and will not induce substantial growth in the area.

b) Cumulatively exceed official regional or local population projections?

The project would not exceed official regional or local population projections. The two single-family lots proposed by the project will not exceed this projection. The project is consistent with the density permitted by the Santa Clarita Valley Area Plan, which the 2008 population estimates were based on.

c) Displace existing housing, especially affordable housing?

The project would not displace existing housing, including affordable housing. These residences are not affordable housing. The site is currently vacant.

d) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The project would not displace any people, necessitating the construction of replacement housing elsewhere. The site is currently vacant, so no residences will be removed nor residents displaced.

15. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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a) Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Fire Department has not indicated any significant effects on fire response time, service level, or facilities. The nearest Los Angeles County fire station is approximately 5.4 miles to the southeast of the project site. No additional fire facilities are required for this project.

Sheriff protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project would not create capacity or service level problems or result in substantial adverse physical impacts. The project site is approximately 11 miles from the Los Angeles County Sheriff's Santa Clarita station.

Schools?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project site is included within the William S. Hart Union High School District ("School District"). Considering the scale of the Project, the two single family lots is not expected to create a capacity problem for the School District.

Parks?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project is conditioned to pay Quimby Fees per Los Angeles County Code Section 21.28.140. No trails are required.

Libraries?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project is conditioned to pay library fees per Los Angeles County Code Section 22.72.

Other public facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project is not perceived to create capacity or service level problems or result in substantial adverse physical impacts for any other public facility.

16. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Review of the project by the Los Angeles County Department of Parks and Recreation (“Parks and Recreation”) has not indicated that the project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project does not include recreational facilities. As indicated on the Parks and Recreation Park Obligation Report, this project has a Quimby Fee obligation of 0.02 acres or \$3,716 in in-lieu fees. The subdivider will be required to pay the in-lieu fees to meet the park obligation of this project. No construction or expansion of recreational facilities is required.

c) Is the project consistent with the Department of Parks and Recreation Strategic Asset Management Plan for 2020 (SAMP) and the County General Plan standards for the provision of parkland?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Review of the project by Parks and Recreation has indicated the project is consistent with the SAMP.

d) Would the project interfere with regional open space connectivity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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There are no trails located in the vicinity or on the site. There are no expected impacts to regional open space connectivity.

17. TRANSPORTATION/TRAFFIC

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel, and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Measures of performance effectiveness include those found in the most up-to-date Southern California Association of Governments (SCAG) Regional Transportation Plan, County Congestion Management Plan, and County General Plan Mobility Element.

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project would not conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system. The growth proposed by the project is accounted for in the Baseline Growth Forecast of the 2008 Southern California Association of Governments' Regional Transportation Plan ("RTP"), which provides the basis for developing the land use assumptions at the regional and small-area levels which build the 2008 Regional Transportation Plan Alternative.

b) Exceed the County Congestion Management Plan (CMP) Transportation Impact Analysis thresholds?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project is comprised of two new single-family lots. Considering the low intensity of the project, it is expected that it will not exceed the County CMP Transportation Impact Analysis thresholds.

c) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP, for designated roads or highways (50 peak hour vehicles added by project traffic to a CMP highway system intersection or 150 peak hour trips added by project traffic to a mainline freeway link)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project is comprised of two new single-family lots. Considering the low intensity of the project, it is expected that it will not conflict with this requirements or established standards of the CMP.

d) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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location that results in substantial safety risks?

The project site is not located near a public or private airstrip and will not encroach into air traffic patterns.

e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed private driveways and fire lane will intersect Burlwood Drive and Hasley Canyon Road at right angles. Therefore, there will be no increase hazards due to design features.

f) Result in inadequate emergency access?

The Los Angeles County Fire Department has determined emergency access, as proposed, is adequate.

g) Conflict with the Bikeway Plan, Pedestrian Plan, Transit Oriented District development standards in the County General Plan Mobility Element, or other adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The project site is not located along a route identified on the Bikeway Plan or Pedestrian Plan, nor is it located within a Transit Oriented District.

h) Decrease the performance or safety of alternative transportation facilities?

The project site does not include or border on alternative transportation facilities. Therefore, the project will not decrease the performance or safety of alternative transportation facilities.

18. UTILITIES AND SERVICE SYSTEMS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Exceed wastewater treatment requirements of the Los Angeles or Lahontan Regional Water Quality Control Boards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Project proposed one septic tank in each lot. The Project is not expected to exceed treatment requirements of the Los Angeles or Lahontan Regional Water Quality Control Boards.

b) Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Project proposes to use septic tanks. Therefore it will not create wastewater system capacity problems or result in expansion of existing facilities. Therefore, there will be no impact.

c) Create drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Public Works' review of the project indicates the project would not create drainage system capacity problems; no construction of new storm water drainage facilities or expansion of existing facilities is required.

d) Have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The project will have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources. Water will be provided by the Castaic Lake Water Agency.

e) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52) or Drought Tolerant Landscaping Ordinance (L.A. County Code, Title 21, § 21.24.430 and Title 22, Ch. 21, Part 21)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The tentative map will be conditioned to comply with the County Low Impact Development ("LID") Ordinance. Future development will be required to comply with LID and the Drought Tolerant

Landscaping Ordinance.

f) Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The serving energy utility, Southern California Edison, has not indicated the project will create energy utility capacity problems or result in the construction of new energy facilities or expansion of existing facilities.

g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The project will be served by the Chiquita Canyon Landfill, which will have sufficient permitted capacity to accommodate the project's solid waste disposal needs.

h) Comply with federal, state, and local statutes and regulations related to solid waste?

The project would be required to comply with federal, state, and local statutes and regulations related to solid waste. The California Integrated Waste Management Act of 1989 requires the County of Los Angeles to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991 mandates that expanded or new development projects to incorporate storage areas for recycling bins into the existing design. The project will include sustainable elements to ensure compliance with all federal, state, and local statutes and regulations related to solid waste. It is anticipated that these project elements will comply with federal, state, and local statutes and regulations to reduce the amount of solidwaste. The project will not displace an existing or proposed waste disposal, recycling, or diversion site.

19. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. As analyzed in the Initial Study sections above, the Project will have no impact or less than significant impact in all sections of this initial study but air quality and biological resources. Mitigation measures are recommended to protect two special-status plant species, peirson’s morning glory and slender mariposa lily (California native Plant Society – CNPS) detected in the property; and to reduce temporary construction emissions to less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The Project does not have cumulative impacts. The impacts to biological resources are isolated to the site and will be mitigated to less than significant with the proposed mitigation measures. Therefore, there are not cumulative impacts to biological resources. In addition, the Project will not be an inducement to future growths, as the project does not require additional infrastructure beyond that necessary to serve the project.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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The project will have no impact on agriculture/forest, cultural resources, energy, geology/soils, and mineral resources. The project will have less than significant impact on aesthetics, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, land use/planning, noise, population/housing, public services, recreation, transportation/traffic, and utilities. The Project will have less than significant impact with mitigation measures on air quality biological resources. Mitigation measures are recommended to protect two special-status plant species, peirson’s morning glory and slender mariposa lily (California native

Plant Society – CNPS) detected in the property; and to reduce temporary construction emissions to less than significant.

PM069664 - Air Quality Analysis (CalEEMod)

Regional Unmitigated Construction Emissions (lbs per day)						
	NOx	CO	PM10	PM2.5	SO2	VOC
Demolition	0	0	0	0	0	0
Site Preparation	74.88	43.05	21.68	13.54	0.07	9.37
Building and Paving	64.15	43.9	4.76	22.76	0.07	9.94
Total Emissions	139.03	86.95	26.44	36.3	0.14	19.31
Regional Thresholds	100	550	150	55	150	75
Significant Impact	NO	NO	NO	NO	NO	NO

Significance thresholds for regional (source):

<http://www.aqmd.gov/ceqa/handbook/signthres.pdf>

Localized Unmitigated Construction Emissions (lbs per day)				
	NOx	CO	PM10	PM2.5
Demolition	0	0	0	0
Site Preparation	74.88	43.05	21.68	13.54
Building and Paving	64.15	43.9	4.76	22.76
Total Emissions	139.03	86.95	26.44	36.3
Localized Thresholds	124	1086.5	18.5	5.5
Significant Impact	NO	NO	YES	YES

Acres disturbed daily: 0.6; Distance from the the property line to the nearest receptor:

80 meters (Localized threshold was calculated as average of the 50 and 100 meters

thresholds - SRA No. 13. Source: <http://www.aqmd.gov/ceqa/handbook/LST/appC.pdf>

Regional Mitigated Construction Emissions (lbs per day)						
	NOx	CO	PM10	PM2.5	SO2	VOC
Demolition	0	0	0	0	0	0
Site Preparation	55.07	31.4	8.26	3.78	0.13	6.87
Building and Paving	12.15	10.23	0.81	0.81	0.07	1.72
Total Emissions	67.22	41.63	9.07	4.59	0.2	8.59
Regional Thresholds	100	550	150	55	150	75
Significant Impact	NO	NO	NO	NO	NO	NO

Significance thresholds for regional (source):

<http://www.aqmd.gov/ceqa/handbook/signthres.pdf>

Localized Mitigated Construction Emissions (lbs per day)				
	NOx	CO	PM10	PM2.5
Demolition	0	0	0	0
Site Preparation	55.07	31.4	8.26	3.78
Building and Paving	12.15	10.23	0.81	0.81
Total Emissions	67.22	41.63	9.07	4.59
Localized Thresholds	124	1086.5	18.5	5.5
Significant Impact	NO	NO	NO	NO

Acres disturbed daily: 0.6; Distance from the the property line to the nearest receptor:

80 meters

Vesting Tentative Parcel Map No. 069664
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	2	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company
Climate Zone	9	Precipitation Freq (Days)	33	

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Two 5-acre lots
- Construction Phase - Custom homes
- Trips and VMT - No domolition required
- On-road Fugitive Dust - No demolition required
- Demolition -
- Grading - Approximately 1.2 acre of the entire 10 acre site will be graded for the two pads

Landscape Equipment -

Construction Off-road Equipment Mitigation - Not all equipment listed will be utilized

Mobile Land Use Mitigation -

Mobile Commute Mitigation - Not applicable

Area Mitigation - TBD

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	20.26	90.81	52.77	0.11	18.45	4.19	22.07	9.94	4.19	13.57	0.00	11,205.71	0.00	1.02	0.00	11,227.20
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	19.81	55.22	33.14	0.13	5.95	2.63	8.58	1.18	2.63	3.81	0.00	14,657.24	0.00	1.52	0.00	14,689.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Mobile	0.17	0.45	1.85	0.00	0.33	0.02	0.35	0.01	0.02	0.03		321.38		0.02		321.74
Total	1.50	0.48	2.69	0.00	0.33	0.02	0.46	0.01	0.02	0.14	14.11	384.37		0.08	0.00	400.45

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Mobile	0.17	0.45	1.85	0.00	0.33	0.02	0.35	0.01	0.02	0.03		321.38		0.02		321.74
Total	1.50	0.48	2.69	0.00	0.33	0.02	0.46	0.01	0.02	0.14	14.11	384.37		0.08	0.00	400.45

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61		7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54		7,997.69		0.84		8,015.31

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.74	0.00	0.38	0.01	0.40	0.01	0.01	0.03		314.15		0.02		314.53
Total	0.14	0.15	1.74	0.00	0.38	0.01	0.40	0.01	0.01	0.03		314.15		0.02		314.53

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.64	0.00	5.64	1.16	0.00	1.16						0.00
Off-Road	6.87	55.07	31.40	0.13		2.62	2.62		2.62	2.62	0.00	14,343.08		1.50		14,374.54
Total	6.87	55.07	31.40	0.13	5.64	2.62	8.26	1.16	2.62	3.78	0.00	14,343.08		1.50		14,374.54

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.74	0.00	0.31	0.01	0.32	0.01	0.01	0.03		314.15		0.02		314.53
Total	0.14	0.15	1.74	0.00	0.31	0.01	0.32	0.01	0.01	0.03		314.15		0.02		314.53

3.3 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49		10,856.65		1.00		10,877.72

3.3 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.16	0.16	1.94	0.00	0.43	0.01	0.44	0.02	0.01	0.03		349.06		0.02		349.47
Total	0.16	0.16	1.94	0.00	0.43	0.01	0.44	0.02	0.01	0.03		349.06		0.02		349.47

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.71	0.00	2.71	0.39	0.00	0.39						0.00
Off-Road	3.42	26.52	17.03	0.12		1.36	1.36		1.36	1.36	0.00	12,971.78		1.22		12,997.47
Total	3.42	26.52	17.03	0.12	2.71	1.36	4.07	0.39	1.36	1.75	0.00	12,971.78		1.22		12,997.47

3.3 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.16	0.16	1.94	0.00	0.34	0.01	0.36	0.02	0.01	0.03		349.06		0.02		349.47
Total	0.16	0.16	1.94	0.00	0.34	0.01	0.36	0.02	0.01	0.03		349.06		0.02		349.47

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.4 Building Construction - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00		17.45		0.00		17.47
Total	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00		17.45		0.00		17.47

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.72	12.15	10.23	0.04		0.81	0.81		0.81	0.81	0.00	4,040.61		0.42		4,049.51
Total	1.72	12.15	10.23	0.04		0.81	0.81		0.81	0.81	0.00	4,040.61		0.42		4,049.51

3.4 Building Construction - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00		17.45		0.00		17.47
Total	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00		17.45		0.00		17.47

3.5 Paving - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48

3.5 Paving - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.12	0.12	1.45	0.00	0.32	0.01	0.33	0.01	0.01	0.02		261.79		0.01		262.10
Total	0.12	0.12	1.45	0.00	0.32	0.01	0.33	0.01	0.01	0.02		261.79		0.01		262.10

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.00	0.00	0.00	0.03		0.00	0.00		0.00	0.00	0.00	2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	0.00	0.00	0.00	0.03		0.00	0.00		0.00	0.00	0.00	2,917.65		0.47		2,927.48

3.5 Paving - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.12	0.12	1.45	0.00	0.26	0.01	0.27	0.01	0.01	0.02		261.79		0.01		262.10
Total	0.12	0.12	1.45	0.00	0.26	0.01	0.27	0.01	0.01	0.02		261.79		0.01		262.10

3.6 Architectural Coating - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	20.26	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

3.6 Architectural Coating - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	281.19		0.04		282.03
Total	19.81	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	281.19		0.04		282.03

3.6 Architectural Coating - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.17	0.45	1.85	0.00	0.33	0.02	0.35	0.01	0.02	0.03		321.38		0.02		321.74
Unmitigated	0.17	0.45	1.85	0.00	0.33	0.02	0.35	0.01	0.02	0.03		321.38		0.02		321.74
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	19.14	20.16	17.54	95,124	95,124
Total	19.14	20.16	17.54	95,124	95,124

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Single Family Housing	17.60	12.10	14.90	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
NaturalGas Unmitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Single Family Housing	226.86	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Single Family Housing	0.22686	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Unmitigated	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.00					0.00	0.00		0.00	0.00						0.00
Hearth	0.21	0.01	0.66	0.00		0.00	0.11		0.00	0.11	14.11	36.00		0.06	0.00	51.55
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00		0.30		0.00		0.31
Total	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.00					0.00	0.00		0.00	0.00						0.00
Hearth	0.21	0.01	0.66	0.00		0.00	0.11		0.00	0.11	14.11	36.00		0.06	0.00	51.55
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00		0.30		0.00		0.31
Total	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Vesting Tentative Parcel Map No. 069664
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	2	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company
Climate Zone	9	Precipitation Freq (Days)	33	

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Two 5-acre lots
- Construction Phase - Custom homes
- Trips and VMT - No demolition required
- On-road Fugitive Dust - No demolition required
- Demolition -
- Grading - Approximately 1.2 acre of the entire 10 acre site will be graded for the two pads

Landscape Equipment -

Construction Off-road Equipment Mitigation - Not all equipment listed will be utilized

Mobile Land Use Mitigation -

Mobile Commute Mitigation - Not applicable

Area Mitigation - TBD

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	20.26	90.84	52.64	0.11	18.45	4.19	22.07	9.94	4.19	13.57	0.00	11,179.93	0.00	1.02	0.00	11,201.40
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	19.81	55.24	33.03	0.13	5.95	2.63	8.58	1.18	2.63	3.81	0.00	14,634.04	0.00	1.51	0.00	14,665.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Mobile	0.18	0.50	1.79	0.00	0.33	0.02	0.35	0.01	0.02	0.03		301.71		0.01		302.02
Total	1.51	0.53	2.63	0.00	0.33	0.02	0.46	0.01	0.02	0.14	14.11	364.70		0.07	0.00	380.73

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Mobile	0.18	0.50	1.79	0.00	0.33	0.02	0.35	0.01	0.02	0.03		301.71		0.01		302.02
Total	1.51	0.53	2.63	0.00	0.33	0.02	0.46	0.01	0.02	0.14	14.11	364.70		0.07	0.00	380.73

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93							0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61		7,997.69		0.84			8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54		7,997.69		0.84			8,015.31

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.16	0.17	1.63	0.00	0.38	0.01	0.40	0.01	0.01	0.03		290.95		0.02		291.31
Total	0.16	0.17	1.63	0.00	0.38	0.01	0.40	0.01	0.01	0.03		290.95		0.02		291.31

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.64	0.00	5.64	1.16	0.00	1.16						0.00
Off-Road	6.87	55.07	31.40	0.13		2.62	2.62		2.62	2.62	0.00	14,343.08		1.50		14,374.54
Total	6.87	55.07	31.40	0.13	5.64	2.62	8.26	1.16	2.62	3.78	0.00	14,343.08		1.50		14,374.54

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.16	0.17	1.63	0.00	0.31	0.01	0.32	0.01	0.01	0.03		290.95		0.02		291.31
Total	0.16	0.17	1.63	0.00	0.31	0.01	0.32	0.01	0.01	0.03		290.95		0.02		291.31

3.3 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49		10,856.65		1.00		10,877.72

3.3 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.19	1.81	0.00	0.43	0.01	0.44	0.02	0.01	0.03		323.28		0.02		323.68
Total	0.18	0.19	1.81	0.00	0.43	0.01	0.44	0.02	0.01	0.03		323.28		0.02		323.68

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.71	0.00	2.71	0.39	0.00	0.39						0.00
Off-Road	3.42	26.52	17.03	0.12		1.36	1.36		1.36	1.36	0.00	12,971.78		1.22		12,997.47
Total	3.42	26.52	17.03	0.12	2.71	1.36	4.07	0.39	1.36	1.75	0.00	12,971.78		1.22		12,997.47

3.3 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.19	1.81	0.00	0.34	0.01	0.36	0.02	0.01	0.03		323.28		0.02		323.68
Total	0.18	0.19	1.81	0.00	0.34	0.01	0.36	0.02	0.01	0.03		323.28		0.02		323.68

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.4 Building Construction - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.09	0.00	0.02	0.00	0.02	0.00	0.00	0.00		16.16		0.00		16.18
Total	0.01	0.01	0.09	0.00	0.02	0.00	0.02	0.00	0.00	0.00		16.16		0.00		16.18

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.72	12.15	10.23	0.04		0.81	0.81		0.81	0.81	0.00	4,040.61		0.42		4,049.51
Total	1.72	12.15	10.23	0.04		0.81	0.81		0.81	0.81	0.00	4,040.61		0.42		4,049.51

3.4 Building Construction - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.09	0.00	0.02	0.00	0.02	0.00	0.00	0.00		16.16		0.00		16.18
Total	0.01	0.01	0.09	0.00	0.02	0.00	0.02	0.00	0.00	0.00		16.16		0.00		16.18

3.5 Paving - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48

3.5 Paving - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.14	1.36	0.00	0.32	0.01	0.33	0.01	0.01	0.02		242.46		0.01		242.76
Total	0.13	0.14	1.36	0.00	0.32	0.01	0.33	0.01	0.01	0.02		242.46		0.01		242.76

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.00	0.00	0.00	0.03		0.00	0.00		0.00	0.00	0.00	2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	0.00	0.00	0.00	0.03		0.00	0.00		0.00	0.00	0.00	2,917.65		0.47		2,927.48

3.5 Paving - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.14	1.36	0.00	0.26	0.01	0.27	0.01	0.01	0.02		242.46		0.01		242.76
Total	0.13	0.14	1.36	0.00	0.26	0.01	0.27	0.01	0.01	0.02		242.46		0.01		242.76

3.6 Architectural Coating - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	20.26	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

3.6 Architectural Coating - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	281.19		0.04		282.03
Total	19.81	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	281.19		0.04		282.03

3.6 Architectural Coating - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.18	0.50	1.79	0.00	0.33	0.02	0.35	0.01	0.02	0.03		301.71		0.01		302.02
Unmitigated	0.18	0.50	1.79	0.00	0.33	0.02	0.35	0.01	0.02	0.03		301.71		0.01		302.02
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	19.14	20.16	17.54	95,124	95,124
Total	19.14	20.16	17.54	95,124	95,124

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Single Family Housing	17.60	12.10	14.90	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
NaturalGas Unmitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Single Family Housing	226.86	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Single Family Housing	0.22686	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		26.69		0.00	0.00	26.85

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Unmitigated	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.00					0.00	0.00		0.00	0.00						0.00
Hearth	0.21	0.01	0.66	0.00		0.00	0.11		0.00	0.11	14.11	36.00		0.06	0.00	51.55
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00		0.30		0.00		0.31
Total	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.00					0.00	0.00		0.00	0.00						0.00
Hearth	0.21	0.01	0.66	0.00		0.00	0.11		0.00	0.11	14.11	36.00		0.06	0.00	51.55
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00		0.30		0.00		0.31
Total	1.33	0.01	0.83	0.00		0.00	0.11		0.00	0.11	14.11	36.30		0.06	0.00	51.86

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation



**Focused Biological Surveys for
Coastal California Gnatcatcher
and Sensitive Plants**

*Castaic Property, Los Angeles County, California
(APN # 3247-052-002)*

Prepared for:

Norman & Patricia Howell
30701 Sloan Canyon Road
Castaic, CA 91384

Prepared by:

Campbell & Associates
10981 Rose Ave. #8
Los Angeles, CA 90034
Contact: Jonathan Campbell, Ph.D.



June 2010

June 8, 2010

Tricia Howell

30701 Sloan Canyon Rd.
Castaic, CA 91384



RE: Results of Focused Protocol Coastal California Gnatcatcher Surveys and Sensitive Plant Surveys for a Proposed 10-ac Site in Castaic, Los Angeles County, California (APN# 3247-052-002)

Dear Mrs. Howell,

The following letter report summarizes the results of two sensitive species surveys conducted within a 10-acre property in the city of Castaic, Los Angeles, CA (hereafter referred to as the "Study Area"; APN# 3247-052-002). Survey efforts include sensitive plant surveys and protocol United States Fish and Wildlife Service (USFWS) surveys to determine the presence/absence of the federally threatened coastal California gnatcatcher (*Poliioptila californica californica*).

No state or federally listed threatened or endangered plant species were found on or adjacent to the Study Area. However, 2 taxa of interest to the California Native Plant Society (CNPS), slender mariposa lily (*Calochortus clavatus* var. *gracilis*: CNPS List 4.2), and Peirson's morning-glory (*Calystegia peirsonii*: CNPS List 1B.2) were detected onsite. Recommendations on how to mitigate for impacts to these individuals are provided herein.

No state or federally listed threatened or endangered bird species were found on or adjacent to the Study Area. However, a northern harrier (State Bird Species of Special Concern), a rufous-crowned sparrow (State Watch List species), and a migrating Vaux's swifts (State Watch List species) were observed onsite.

STUDY AREA LOCATION/DESCRIPTION

The 9.7 acre Study Area is located in the City of Castaic, in the northwestern region of Los Angeles County, California. The Site is located immediately to the south of the intersection of Hasley Canyon Road and Burlwood Drive. The site is located on the United States Geological Survey (USGS) 7.5' Newhall Quadrangle, Township 5 North, Range 17 West, Section 33 (Attachment 1).

Native habitats in the study area consists of chamise chaparral (3.42 ac) and coastal sage scrub (3.34 ac), and non-native grassland/disturbed (2.96 ac) (Sawyer and Keeler-Wolf 1995) (Attachment 2). Chaparral habitats are mostly found on the north and west facing slopes on the lower portions of the hill. The scrub habitat is found on the higher portions of the site and along the spine of the hill. The Study Area consists of a hill with two slopes descending into shallow canyons. Elevations at the Study Area range from 1600 feet to 1800 feet.

There are small ephemeral drainages in both adjacent canyons. The surrounding area consist of rolling foothills with non-native annual grasslands, chaparral, coastal sage scrub, patches of riparian habitat, and oak woodlands within canyon bottoms. The area east and south of Hasley Canyon is largely developed with a mixture of residential housing and warehouses. To the west and north, there are native habitats and include Lake Piru and the Los Padres National Forest

METHODOLOGY

Sensitive Plants Focused Surveys

On April 24 and June 1, 2010, Jonathan Campbell and Joe Decruyenaere conducted special-status plant surveys at the Study Area to determine the potential presence or absence of the following species, which are included in the California Natural Diversity Database (CNDDDB) and CNPS Inventory of Rare and Endangered Plants as having been reported from the project region, as defined by the USGS quad sheet containing the project site, as well as the surrounding 8 quads¹:

- *Allium howellii* var. *clokeyi* (Mt. Pinos onion)
- *Astragalus brauntonii* (Braunton's milk-vetch)
- *Berberis nevini* (Nevin's barberry)
- *California macrophylla* (round-leaved filaree)
- *Calochortus clavatus* var. *gracilis* (slender mariposa lily)
- *Calochortus plummerae* (Plummer's mariposa lily)
- *Calystegia peirsonii* (Peirson's morning-glory)
- *Chorizanthe parryi* var. *fernandina* (San Fernando Valley spineflower)
- *Deinandra minthornii* (Santa Susana tarplant)
- *Dodecahema leptoceras* (slender-horned spineflower)
- *Dudleya parva* (Conejo dudleya)
- *Galium grande* (San Gabriel bedstraw)
- *Harpagonella palmeri* (Palmer's grapplinghook)
- *Helianthus nuttallii* ssp. *parishii* (Los Angeles sunflower)
- *Horkelia cuneata* ssp. *puberula* (mesa horkelia)
- *Lepechinia rossii* (Ross' pitcher sage)
- *Malacothamnus davidsonii* (Davidson's bush-mallow)
- *Monardella linoides* ssp. *oblonga* (Tehachapi monardella)
- *Navarretia ojaiensis* (Ojai navarretia)
- *Opuntia basilaris* var. *brachyclada* (short-joint beavertail)
- *Orcuttia californica* (California Orcutt grass)
- *Pentachaeta lyonii* (Lyon's pentachaeta)
- *Pseudognaphalium leucocephalum* (white rabbit-tobacco)
- *Senecio aphanactis* (chaparral ragwort)
- *Symphyotrichum greatae* (Greata's aster)

All on-site habitats were searched by walking meandering transects of opportunity in order to achieve 100% visual coverage of the site. Appendix 1 outlines a complete list of all plant species observed during this effort. Nomenclature follows that of Hickman (1993), as updated at the Jepson Online Interchangeⁱⁱ

Coastal California Gnatcatcher Focused Surveys

The coastal California gnatcatcher is listed as a threatened species by the USFWS and as a species of special concern by the California Department of Fish and Game (CDFG) (USFWS 1993, CDFG 2009). They are darkish blue-gray above, dark gray-white below, and 4.5 inches long. Males exhibit a dark black cap in breeding plumage. They inhabit dry coastal slopes, washes, and mesas, and are restricted to areas of coastal sage scrub below 2,000 feet in elevation. They are less abundant in coastal scrub-chaparral transition areas and areas dominated by black sage (*Salvia mellifera*), white sage (*Salvia leucophylla*), or lemonadeberry (*Rhus integrifolia*) (Atwood and Bontrager 2001). They nest in shrubs within coastal sage scrub from mid-February to August and remain on their breeding territories throughout the year. They exist in small, local populations in coastal southern California, extending north to Ventura County. There are local records within 5 miles of the study area (CNDDDB 2010).

Surveys for the coastal California gnatcatcher were conducted by wildlife biologist Thomas Ryan, following methods described in Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines February 28, 1997 (USFWS 1997). This activity is authorized by the USFWS section 10(a)(1)(A) permit number TE-097516, and a Scientific Collecting Permit SC-003409, and CDFG MOU. Notification was provided to the local USFWS and CDFG contacts on March 18, 2010.

Six surveys were conducted on ~~March 27, April 6, 16, 23, 30,~~ and May 11, 2010 (Table 1). Mr. Ryan walked the study area and searched it using 10x binoculars. He used tape playbacks of California gnatcatcher “mew” and scolding calls to elicit a response from any individuals in the vicinity. Playbacks were used following a period of listening for unsolicited calls and followed by five additional minutes of silent listening. Surveys were conducted under clear conditions, with temperatures ranging from 40-65 degrees Fahrenheit, and winds ranging from 0–9 mph.

Table 1. Summary of weather conditions during focused California Gnatcatcher surveys at the study area

Survey	Date	Surveyor	Time	Temp (°F)	Wind (mph)	Conditions
1	3/27/10	Thomas Ryan	07:02-07:54	58-62	1-6	Clear
2	4/6/10	Thomas Ryan	06:45-07:40	48-54	3-9	Clear
3	4/16/10	Thomas Ryan	07:28-08:20	55-65	Calm	Clear
4	4/23/10	Thomas Ryan	07:20-08:10	40-56	Calm	Clear
5	4/30/10	Thomas Ryan	07:55-08:45	53-55	0-3	Clear
6	5/11/10	Thomas Ryan	09:10-09:55	56-62	3-8	Clear

RESULTS

Sensitive Plant Focused Surveys

The project site supports chaparral, scrub, grassland and ruderal vegetation types. On-site chaparral is dominated by scrub oak (*Quercus berberidifolia*), coffeeberry (*Frangula californica*), chamise (*Adenostoma fasciculatum*), mountain mahogany (*Cercocarpus betuloides* var. *betuloides*), and toyon (*Heteromeles arbutifolia*). Occasional blue elderberry (*Sambucus nigra* ssp. *caerulea*), skunk

bush (*Rhus aromatica*), southern chaparral honeysuckle (*Lonicera subspicata* var. *denudata*), and hollyleaf cherry (*Prunus ilicifolia* ssp. *ilicifolia*) are also present as scattered individuals. The understory includes California goosefoot (*Chenopodium californicum*), wild celery (*Apiastrum angustifolium*), California biscuitroot (*Lomatium californicum*), scapellote (*Acourtia microcephala*), mugwort (*Artemisia douglasiana*), western thistle (*Cirsium occidentale*), California everlasting (*Gnaphalium californicum*), cliff malacothrix (*Malacothrix saxatilis*), spotted hideseed (*Eucrypta chrysanthemifolia*), California peony (*Paeonia californica*), Chinese houses (*Collinsia heterophylla*), streambank springbeauty (*Claytonia parviflora* ssp. *parviflora*), miner's-lettuce (*C. perfoliata*), goose-grass (*Galium aparine*), chaparral nightshade (*Solanum xanti*), ripgut brome (*Bromus diandrus*), purple needlegrass (*Nassella pulchra*), and one-sided bluegrass (*Poa secunda* ssp. *secunda*).

Scrub communities seem generally to be transitional from disturbance towards a chaparral climax. In some areas, such as along ridge tops and southern exposures, they are likely stable formations. In either case, they are largely dominated by native species including California sagebrush (*Artemisia californica*), California aster (*Corethrogyne filaginifolia*), golden yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*), thick-leaf yerba santa (*Eriodictyon crassifolium* var. *nigrescens*), Santa Barbara milkvetch (*Astragalus trichopodus* var. *phoxus*), deerweed (*Lotus scoparius* var. *scoparius*), chia sage (*Salvia columbariae* var. *columbariae*), purple sage (*S. leucophylla*), black sage (*S. mellifera*), California wishbone bush (*Mirabilis laevis* var. *crassifolia*), California buckwheat (*Eriogonum fasciculatum*), Whipple's yucca (*Yucca whipplei*), giant wildrye (*Leymus condensatus*), purple needlegrass, and one-sided bluegrass.

Grassland formations are principally dominated by non-native annual taxa, including slender oat (*Avena barbata*), ripgut brome, soft chess (*Bromus hordeaceus*), red brome (*B. madritensis* ssp. *rubens*), and mouse-tail fescue (*Vulpia myuros*). Additional scattered native and non-native species include annual bur-sage (*Ambrosia acanthicarpa*), tocolote (*Centaurea melitensis*), clustered tarplant (*Deinandra fasciculata*), Douglas's silverpuffs (*Microseris douglasii* ssp. *douglasii*), small wire-lettuce (*Stephanomeria exigua* ssp. *exigua*), silverpuffs (*Uropappus lindleyi*), rancher's fireweed (*Amsinckia menziesii* var. *menziesii*), short-pod mustard (*Hirschfeldia incana*), Peirson's morning-glory (*Calystegia peirsonii*), rattlesnake weed (*Chamaesyce albomarginata*), and turkey mullein (*Croton setigerus*).

Where grass and herb dominated areas support a relatively high density of native taxa, these appear generally to be either transitional to scrub and chaparral formations, or else are interstitial to these formations and therefore may not warrant recognition as separate vegetation types due to their limited spatial extent. These areas support all of the above listed grassland associated species and also show a high relative cover of additional native species including blow-wives (*Achyrrachaena mollis*), common cryptantha (*Cryptantha intermedia*), whispering bells (*Emmenanthe penduliflora* var. *penduliflora*), Parry's larkspur (*Delphinium parryi* ssp. *parryi*), Andrew's bedstraw (*Galium andrewsii* ssp. *intermedium*), purple owl's-clover (*Castilleja exserta* ssp. *exserta*), amole (*Chlorogalum pomeridianum* var. *pomeridianum*), blue-eyed-grass (*Sisyrinchium bellum*), purple needlegrass, one-sided bluegrass, small fescue (*Vulpia microstachys*), and blue dicks (*Dichelostemma capitatum* ssp. *capitatum*).

Ruderal vegetation dominates the northern portion of the property close to Hasley Canyon Road. This area appears to have undergone recent, and perhaps periodic, disturbance. Disturbance tolerant native and non-native species are dominant, primarily annuals and short-lived perennials. Waifs are also scattered, including a seedling of an unidentified pine, which may be the result of unauthorized dumping of green waste. Species within ruderal vegetation include lamb's quarters (*Chenopodium album*), annual bur-sage, Italian thistle (*Carduus pycnocephalus*), tocolote, California aster, prickly lettuce (*Lactuca serriola*), cliff malacothrix, small wire-lettuce, rancher's fireweed, short-pod mustard, turkey mullein, deerweed, miniature lupine (*Lupinus bicolor*), burclover (*Medicago polymorpha*), yellow sweet-clover (*Melilotus indicus*), red-stem filaree (*Erodium cicutarium*), henbit (*Lamium amplexicaule*), curly dock (*Rumex crispus*), slender oat, rescuegrass (*Bromus catharticus*), ripgut brome, soft chess, red brome, and hare barley (*Hordeum murinum* ssp. *leporinum*).

Special-status species detected on site

Two special-status plant species, Peirson's morning glory (CNPS List 4.2) and slender mariposa lily (CNPS List 1B.2), were confirmed as present on the project site (Attachment 3). Peirson's morning-glory was detected within annual grassland in the northernmost portion of the site, east of an unpaved access road. Slender mariposa lily was detected within openings in coastal sage scrub habitat along the ridge in the central portion of the project site. These locations were collected with a GPS and are listed in Table 2.

Table 2. Latitude/Longitude (Degree Decimal) of special status plant species found onsite.

Species	Latitude	Longitude
Slender Mariposa Lily	34.47386	-118.67716
Slender Mariposa Lily	34.47303	-118.67733
Slender Mariposa Lily	34.47282	-118.67742
Peirson's Morning Glory	34.47232	-118.67765

Species considered not potentially present

Due to geographic and broad habitat considerations such as elevation and geological formations present within the site vicinity, the following are considered not to be potentially present within the site vicinity, and were thus not included as target species in the survey effort:

- Mt. Pinos onion: outside of the known range of the species, which is located to the north, in the Topa Topa Mountains
- Santa Susana tarplant: outside of the known range of the species, which is restricted to sandstone outcrops in the Santa Susana and Santa Monica Mountains; no suitable sandstone outcrops are present within the vicinity of the project site.
- Conejo dudleya: restricted to outcrops of the Conejo Volacanic formation in the western Santa Monica Mountains; the site is outside the species' range.
- San Gabriel bedstraw: restricted to granitic outcrops within the San Gabriel Mountains; the site is outside the species geographic and elevational range.

- Tehachapi monardella: restricted to higher elevation habitats (lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest) within the Tehachapi area; the site is outside the species' geographic and elevational range.
- Lyon's pentachaeta: restricted to heavy soils of volcanic origin within the Santa Monica Mountains; the site is outside the species geographic range, and volcanic formations are not present within the vicinity.

Of the target species not detected on the site, several are perennials or shrubs that are characteristically conspicuous enough that a lack of observation is considered sufficient evidence of their absence and no further consideration of their potential presence is necessary. These species include Nevin's barberry, Los Angeles sunflower, mesa horkelia, Ross' pitcher sage, Davidson's bush-mallow, and short-joint beavertail.

Due to a lack of suitable habitat elements on site, the following species, with key habitat requirements indicated, are also discounted from further consideration of potential presence:

- Braunton's milk-vetch: limited to carbonate soils.
- Round-leaved filaree: restricted to clay soils.
- Slender-horned spineflower: restricted to alluvial terraces along river and stream floodplains.
- Palmer's grapplinghook: restricted to clay soils.
- California Orcutt grass: restricted to vernal pools.
- White rabbit-tobacco: restricted to alluvial habitats on sandy or gravelly soils.
- Chaparral ragwort: restricted to drying alkaline flats.
- Greata's aster: restricted to mesic habitats.

* Species considered potentially present

Despite negative survey results, Plummer's mariposa lily, San Fernando Valley spineflower, and Ojai navarretia may be present in low numbers or within the seed or bulb bank in on-site soils. Nevertheless, the fact that these species were not detected during the course of appropriately timed surveys suggests that further surveys are unwarranted, unless site conditions change so as to alter the factors favoring their growth (e.g., fire or mechanisms of vegetation removal).

Recommendations

1. Peirson's morning-glory is easily transplantable, and should the development of the project site result in impacts to occupied habitat for this species, individuals could be transplanted to other suitable on-site habitat areas of grassland or open scrub. Removal of plants prior to transplantation should occur while above-ground portions of the plants are dormant (late summer to fall), so as to reduce the chance of shock to the plants and thereby increase the likelihood of successful relocation.
2. Mariposa lilies (genus *Calochortus*) have been transplanted with varying degrees of success; however, successful relocation is more likely if transplanted bulbs are collected after plants have entered dormancy in the fall. Bulbs should be collected *in situ*, along with a relatively large volume of containing soil, so that roots and bulbs are not damaged. This may be accomplished by flagging plant locations while flowers or fruits are still present on the plant and returning to the population in the fall to remove the intact soil with a backhoe or similar

instrument capable of removing moderate volumes of soil with minimal disturbance. Transplantation should occur immediately subsequent to collection. Collection of seeds subsequent to fruit maturation is also recommended. These may be collected in mid to late summer for later sowing within suitable habitat areas of the site.

3. Special-status plant surveys are typically considered valid by the California Department of Fish and Game for a period of two years. Should two years elapse between the preparation of this survey report and the granting of permits to entitle the development of the subject property, this report should be updated to confirm that the present findings remain valid and to provide further recommendations if necessary.

Coastal California Gnatcatcher Focused Surveys

No California gnatcatchers were seen or heard during any of the surveys. Mr. Ryan detected a northern harrier, a State Bird Species of Special Concern, as well as rufous-crowned sparrow, a State Watch List species. There is suitable nesting habitat for both species on the property. Additionally, migrating Vaux's swifts, a State Watch List species, were also observed. This species is not known to nest locally and there is no suitable nesting habitat on the property. A complete list of bird species observed during this effort is found in Appendix 2.

CONCLUSION

No state or federally listed threatened or endangered plant species were found on or adjacent to the Study Area. Two CNPS sensitive plants, however, were detected on site, which include: Peirson's morning glory (CNPS List 4.2) and slender mariposa lily (CNPS List 1B.2). Recommendations on how minimize impacts to these species are as follows.

Recommendations

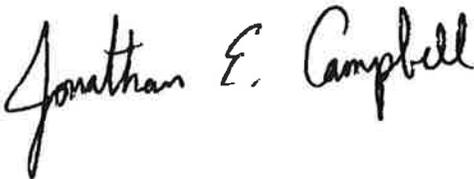
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No state or federally listed threatened or endangered bird species were found on or adjacent to the Study Area. However, a northern harrier, rufous-crowned sparrow, and Vaux's swift were detected foraging over the property.

If you have any questions or comments, feel free to contact me.

Sincerely,

CAMPBELL & ASSOCIATES



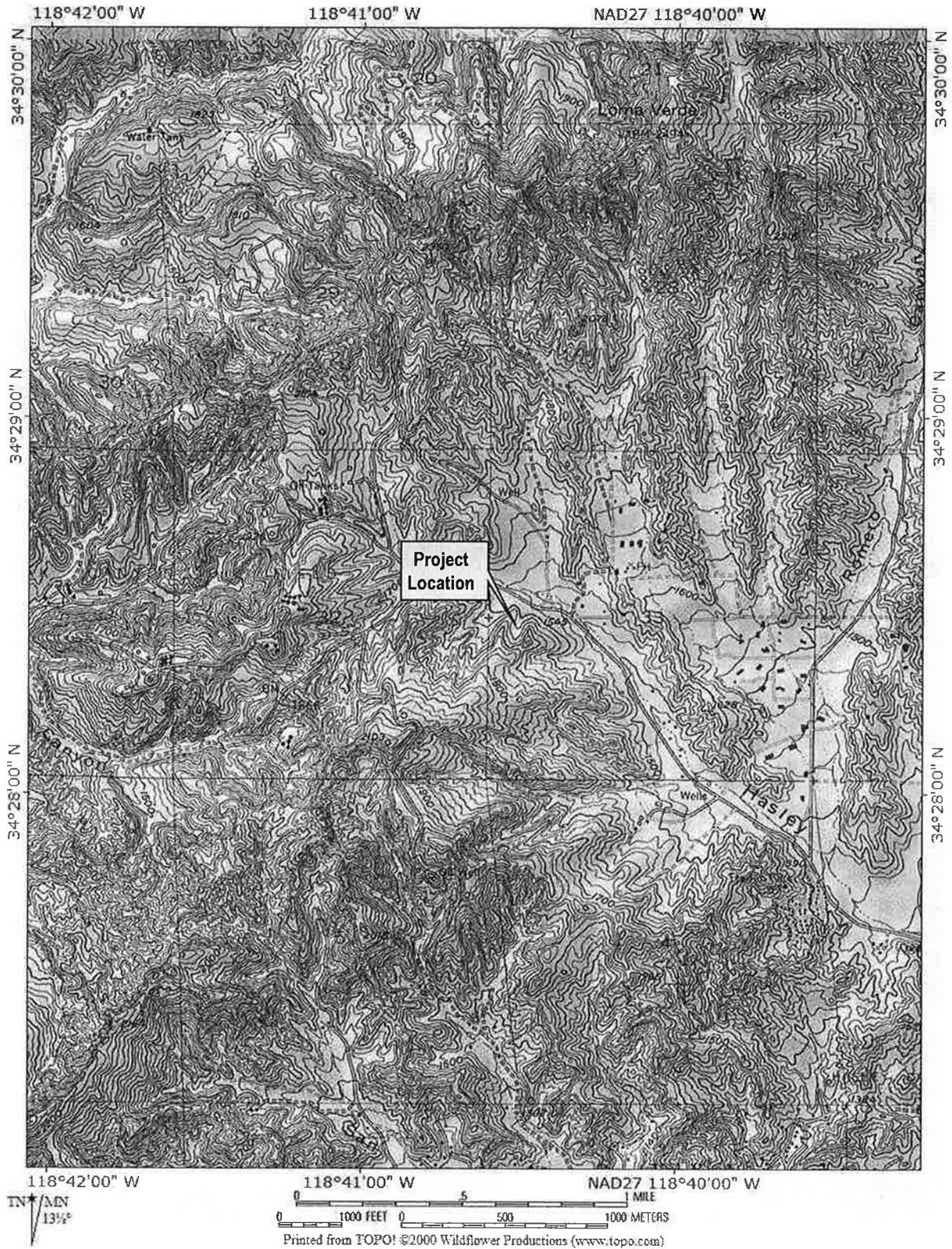
Jonathan E. Campbell
Biologist/GIS Analyst

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ⁱ USGS quads included in database queries are Val Verde, Whitaker Peak, Warm Springs Mountain, Piru, Simi, Cobblestone Mountain, Newhall, Santa Susana, Oat Mountain

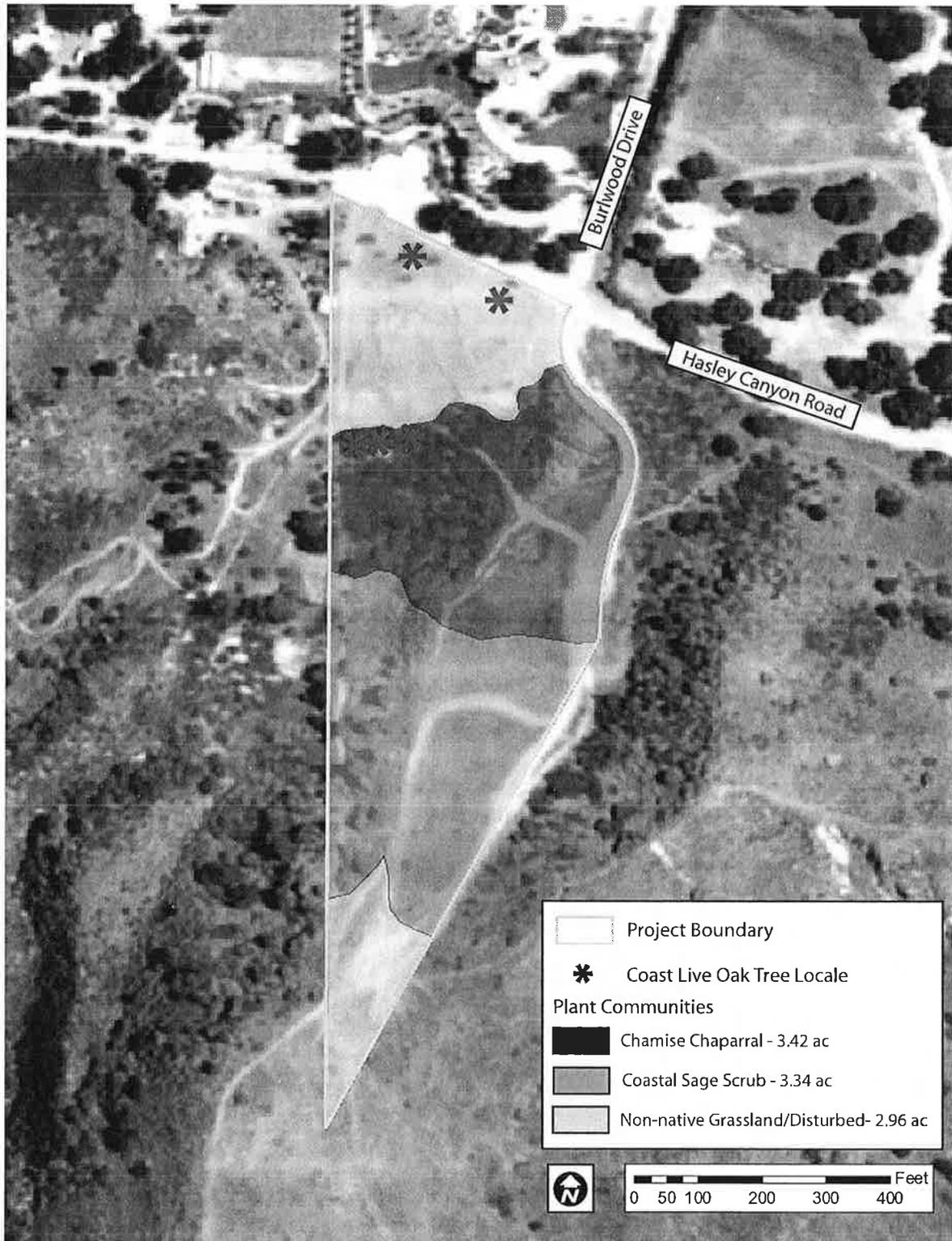
ⁱⁱ Available at <http://ucjeps.berkeley.edu/interchange.html>.



USGS Topographic Map

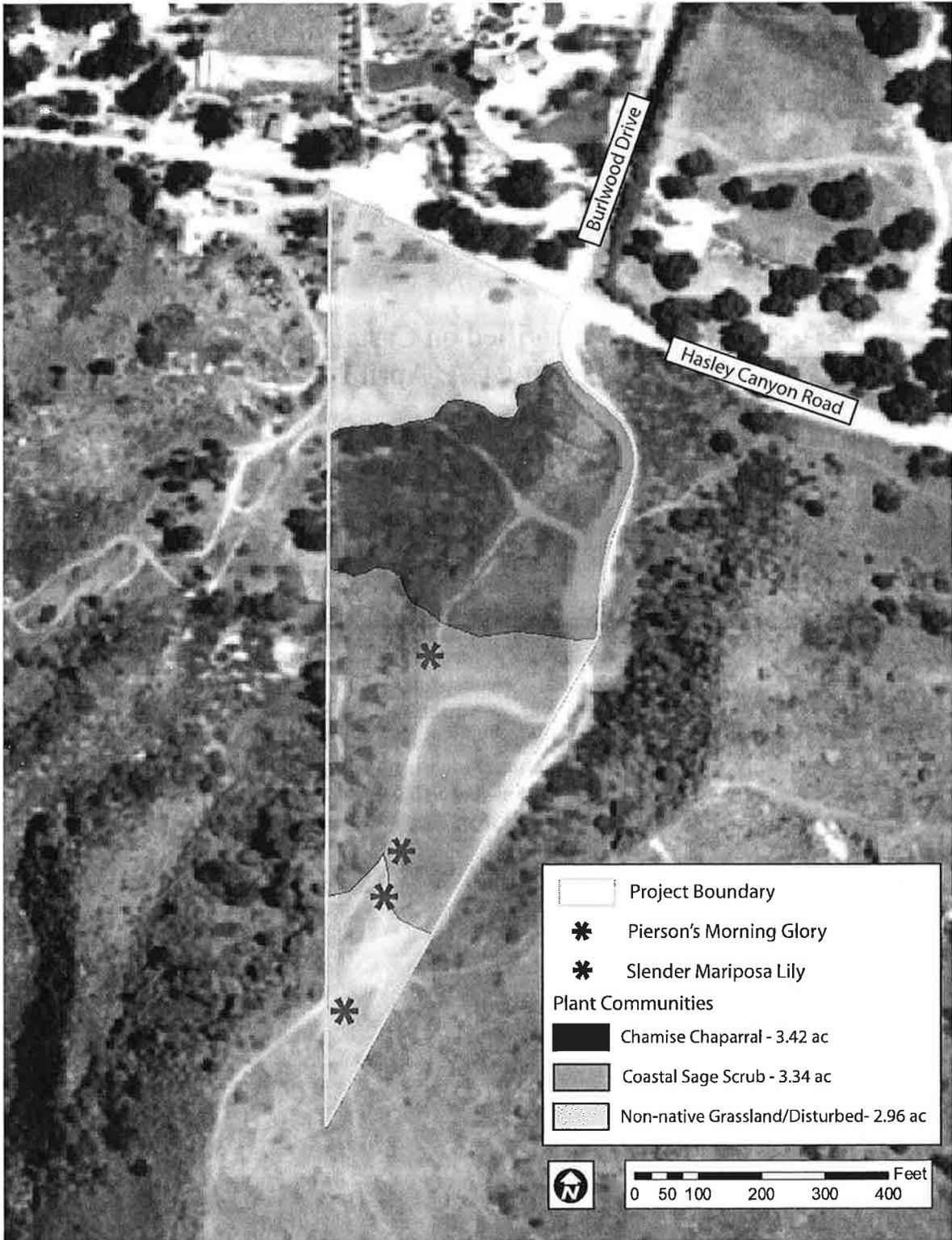


Attachment 1



Biological Resources Map

Attachment 2



Sensitive Species Location Map

Attachment 3

APPENDIX 1

List of Plant Species Identified on Castaic Site, Castaic, Los Angeles County, CA, April 24, 2010

Underlined font indicates special-status taxa

sp. — species

ssp. — subspecies

var. — variety

cf. — similar to but not identified with certainty as the species referred, due to a lack of flowers or other crucial identifying characters

^N — Non-native taxa

CONIFERS

Pinaceae - Pine Family

Pinus sp. Pine, seedling^N

DICOTS

Adoxaceae - Moschatel Family

Sambucus nigra ssp. *caerulea* Blue elderberry

Amaranthaceae - Amaranth Family

Chenopodium album lamb's quarters^N
Chenopodium californicum California goosefoot

Anacardiaceae - Sumac Family

Rhus aromatica skunk bush

Apiaceae - Carrot Family

Apiastrum angustifolium wild celery
Lomatium californicum California biscuitroot

Asteraceae - Sunflower Family

Achyrachaena mollis blow-wives
Acourtia microcephala scapellote
Ambrosia acanthicarpa annual bur-sage
Artemisia californica California sagebrush
Artemisia douglasiana mugwort
Baccharis salicifolia mulefat
Carduus pycnocephalus Italian thistle^N
Centaurea melitensis tocolote^N
Cirsium occidentale western thistle
Corethrogyne filaginifolia California aster
Deinandra fasciculata clustered tarplant
Erigeron cf. foliosus fleabane aster
Eriophyllum confertiflorum var.
confertiflorum golden yarrow
Gnaphalium californicum California everlasting
Lactuca serriola prickly lettuce^N
Malacothrix saxatilis cliff malacothrix
Microseris douglasii ssp. *douglasii* Douglas's silverpuffs
Rafinesquia californica California chicory
Stephanomeria exigua ssp. *exigua* small wire-lettuce
Uropappus lindleyi silverpuffs

Boraginaceae - Borage Family

Amsinckia menziesii var. *menziesii* rancher's fireweed

<i>Cryptantha intermedia</i>	common cryptantha
<i>Emmenanthe penduliflora</i> var. <i>penduliflora</i>	whispering bells
<i>Eriodictyon crassifolium</i> var. <i>nigrescens</i>	thick-leaf yerba santa
<i>Eucrypta chrysanthemifolia</i>	spotted hideseed
Brassicaceae - Mustard Family	
<i>Hirschfeldia incana</i>	short-pod mustard ^N
Cactaceae - Cactus Family	
<i>Opuntia basilaris</i> var. <i>basilaris</i>	beavertail cactus
Caprifoliaceae - Honeysuckle Family	
<i>Lonicera subspicata</i> var. <i>denudata</i>	southern subspicata
Convolvulaceae - Morning-glory Family	
<i>Calystegia peirsonii</i>	<u>Pierson's morning-glory</u> - CNPS List 4.2
Cucurbitaceae - Gourd Family	
<i>Marah macrocarpus</i>	manroot
Euphorbiaceae - Spurge Family	
<i>Chamaesyce albomarginata</i>	rattlesnake weed
<i>Croton setigerus</i>	turkey mullein
Fabaceae - Legume Family	
<i>Astragalus trichopodus</i> var. <i>phoxus</i>	Santa Barbara milkvetch
<i>Lotus salsuginosus</i>	coastal bird's-foot trefoil
<i>Lotus scoparius</i> var. <i>scoparius</i>	deerweed
<i>Lupinus bicolor</i>	miniature lupine
<i>Lupinus succulentus</i>	arroyo lupine
<i>Medicago polymorpha</i>	burclover ^N
<i>Melilotus indicus</i>	yellow sweet-clover ^N
Fagaceae - Oak Family	
<i>Quercus berberidifolia</i>	scrub oak
<i>Quercus wislizeni</i> var. <i>frutescens</i>	interior live oak
Geraniaceae - Geranium Family	
<i>Erodium cicutarium</i>	red-stem filaree ^N
Lamiaceae - Mint Family	
<i>Lamium amplexicaule</i>	henbit ^N
<i>Salvia columbariae</i> var. <i>columbariae</i>	chia

<i>Salvia leucophylla</i>	purple sage
<i>Salvia mellifera</i>	black sage
Malvaceae - Mallow Family	
<i>Malacothamnus fasciculatus</i>	chaparral bush mallow
Nyctaginaceae - Four O'clock Family	
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	California wishbone bush
Paeoniaceae - Peony Family	
<i>Paeonia californica</i>	California peony
Plantaginaceae - Plantain Family	
<i>Collinsia heterophylla</i>	Chinese houses
Polemoniaceae - Phlox Family	
<i>Eriastrum</i> cf. <i>sparsiflorum</i>	few-flowered wooly star
Polygonaceae - Buckwheat Family	
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Rumex crispus</i>	curly dock ^N
Portulacaceae - Purslane Family	
<i>Claytonia parviflora</i> ssp. <i>parviflora</i>	streambank springbeauty
<i>Claytonia perfoliata</i>	miner's-lettuce
Ranunculaceae - Buttercup Family	
<i>Delphinium parryi</i> ssp. <i>parryi</i>	Parry's larkspur
Rhamnaceae - Buckthorn Family	
<i>Frangula californica</i>	coffeeberry
Rosaceae - Rose Family	
<i>Adenostoma fasciculatum</i>	chamise
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	mountain mahogany
<i>Heteromeles arbutifolia</i>	toyon
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	hollyleaf cherry
Rubiaceae - Madder Family	
<i>Galium andrewsii</i> ssp. <i>intermedium</i>	Andrew's bedstraw
<i>Galium aparine</i>	goose-grass
Scrophulariaceae - Figwort Family	
<i>Castilleja exserta</i> ssp. <i>exserta</i>	purple owl's-clover

Solanaceae - Nightshade Family

Solanum xanti

chaparral nightshade

MONOCOTS

Agavaceae - Agave Family

Chlorogalum pomeridianum var.
pomeridianum

amole

Yucca whipplei

Whipple's yucca

Iridaceae - Iris Family

Sisyrinchium bellum

blue-eyed-grass

Liliaceae - Lily Family

Calochortus cf. clavatus var.
gracilis

slender mariposa lily - CNPS List 1B.2

Poaceae - Grass Family

Avena barbata

slender oat^N

Bromus catharticus

rescuegrass^N

Bromus diandrus

rippgut brome^N

Bromus hordeaceus

soft chess^N

Bromus madritensis ssp. *rubens*

red brome^N

Hordeum murinum ssp. *leporinum*

hare barley^N

Leymus condensatus

giant wildrye

Nassella pulchra

purple needlegrass

Poa secunda ssp. *secunda*

one-sided bluegrass

Schismus barbatus

Mediterranean splitgrass^N

Vulpia microstachys

small fescue

Vulpia myuros

mouse-tail fescue^N

Themidaceae - Themis Family

Dichelostemma capitatum ssp.
capitatum

blue dicks

APPENDIX 2

List of Wildlife Species Identified on Castaic Site, Castaic, Los Angeles County, CA

Common Name	Scientific Name	Observed
Western Fence Lizard	<i>Sceleporous occidentalis</i>	X
Alligator Lizard	<i>Gerrhonotus multicarinatus</i>	X
Turkey Vulture	<i>Cathartes aura</i>	X
Northern Harrier	<i>Circus cyaneus</i>	X
Red-tailed Hawk	<i>Buteo jamaicensis</i>	X
California Quail	<i>Callipepla californica</i>	X
Rock Dove	<i>Columba livia</i>	X
Band-tailed Pigeon	<i>Columba fasciata</i>	X
Mourning Dove	<i>Zenaida macroura</i>	X
Vaux's Swift	<i>Chaetura vauxi</i>	X
Anna's Hummingbird	<i>Calypte anna</i>	X
Acorn Woodpecker	<i>Melanerpes formicivorus</i>	X
Nuttall's Woodpecker	<i>Picoides nuttallii</i>	X
Western Wood-Pewee	<i>Contopus sordidulus</i>	X
Pacific-slope Flycatcher	<i>Empidonax difficilis</i>	X
Black Phoebe	<i>Sayornis nigricans</i>	X
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	X
Cassin's Kingbird	<i>Tyrannus vociferans</i>	X
Western Scrub-Jay	<i>Aphelocoma californica</i>	X
American Crow	<i>Corvus brachyrhynchos</i>	X
Common Raven	<i>Corvus corax</i>	X
Tree Swallow	<i>Tachycineta bicolor</i>	X
No. Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	X
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	X
Barn Swallow	<i>Hirundo rustica</i>	X
Oak Titmouse	<i>Baeolophus inornatus</i>	X
Bushtit	<i>Psaltriparus minimus</i>	X
White-breasted Nuthatch	<i>Sitta carolinensis</i>	X
Bewick's Wren	<i>Thryomanes bewickii</i>	X
Ruby-crowned Kinglet	<i>Regulus calendula</i>	X
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	X
Western Bluebird	<i>Sialia mexicana</i>	X
American Robin	<i>Turdus migratorius</i>	X
Wrentit	<i>Chamaea fasciata</i>	X
Northern Mockingbird	<i>Mimus polyglottos</i>	X
California Thrasher	<i>Toxostoma redivivum</i>	X
European Starling	<i>Sturnus vulgaris</i>	X
Cedar Waxwing	<i>Bombycilla cedrorum</i>	X
Phainopepla	<i>Phainopepla nitens</i>	X
Orange-crowned Warbler	<i>Vermivora celata</i>	X
Yellow-rumped Warbler	<i>Dendroica coronata</i>	X
Wilson's Warbler	<i>Wilsonia pusilla</i>	X
Spotted Towhee	<i>Pipilo maculatus</i>	X
California Towhee	<i>Pipilo crissalis</i>	X
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	X

Common Name	Scientific Name	Observed
Song Sparrow	<i>Melospiza melodia</i>	X
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	X
Dark-eyed Junco	<i>Junco hyemalis</i>	X
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	X
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	X
Brown-headed Cowbird	<i>Molothrus ater</i>	X
Bullock's Oriole	<i>Icterus bullockii</i>	X
House Finch	<i>Carpodacus mexicanus</i>	X
Lesser Goldfinch	<i>Carduelis psaltria</i>	X
American Goldfinch	<i>Carduelis tristis</i>	X
Virginia Opossum	<i>Didelphis virginiana</i>	X
Coyote	<i>Canis latrans</i>	X
Gray Fox	<i>Urocyon cinereoargenteus</i>	X
Domestic Dog	<i>Canis familiaris</i>	X
Raccoon	<i>Procyon lotor</i>	X
Mule Deer	<i>Odocoileus hemionus</i>	X
California Ground Squirrel	<i>Spermophilus beecheyi</i>	X
Botta Pocket Gopher	<i>Thomomys bottae</i>	X
Desert Cottontail	<i>Sylvilagus audubonii</i>	X

General Biological Resource Assessment



*Castaic Property, Los Angeles County, California
(APN # 3247-052-002)*

Final Report



Prepared for:

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February 2010

Sensitive Plants

Suitable habitat is present onsite within the coastal sage scrub and chamise chaparral plant communities for several sensitive plant species known to occur within the region. A complete list of potential sensitive plant species which may occur onsite is listed within.

Oak Trees

The Site supports several free-standing coast live oak (*Quercus agrifolia*) trees. These individuals are subject to the Los Angeles County Oak Tree Ordinance.

Attachments:	A:	Biological Resources Map
	B1 – B3:	Site Photographs
	C:	Los Angeles Oak Tree Ordinance

METHODS OF STUDY

APPROACH

Prior to visiting the Site, a review of all available and relevant data on the biological characteristics, sensitive habitats, and species potentially present on or adjacent to the Site was conducted. Additionally, aerial photography, a USGS topographic map, and digital ortho quarter quadrangle (DOQQ) data were examined. After reviewing the available information, Campbell & Associates (C&A) conducted a physical site assessment.

During this initial survey the entire Site's habitat was characterized, the preliminary vegetative communities mapped, and the potential to support sensitive species evaluated. An efficient site assessment was maximized by the use of detailed aerial photography data. This data, which contains a digital image derived from aerial photography with orthographic projection properties, were used in conjunction with C&A's in-house geographic information system (GIS) database as an important base layer to identify vegetation communities, drainage features, and the relationship to USFWS designated critical habitat boundaries. Vegetation communities were then "ground-truthed" during field observations to obtain characteristic descriptions.

LITERATURE REVIEW

The study was initiated with a review of relevant literature on the biological resources of the Site and vicinity. Federal register listings, protocols, and species data provided by the USFWS were reviewed in conjunction with anticipated federally listed species potentially occurring within the Site. The California Natural Diversity Database (CNDDDB), a California Department of Fish and Game (Natural Heritage Division) species account database, was also reviewed for pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the Site. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Documents consulted regarding potential onsite biological conditions are listed in the references section at the end of this report.

FIELD INVESTIGATION

The Site was surveyed on February 10, 2010 by C&A biologist Jonathan Campbell, Ph.D. The survey included complete coverage of the Site, with special attention focused toward sensitive habitats or those areas potentially supporting sensitive flora or fauna.

Plant Community/Habitat Classification and Mapping

Plant communities were preliminarily mapped with the aid of a 1:400 scale aerial photograph and a 7.5-minute USGS DOQQ map. Sensitive or unusual biological resources observed in the field were noted on the aerial photo as well (if applicable). Scientific names are employed upon initial mention of each species; common names are employed thereafter (if applicable).

EXISTING CONDITIONS

PLANT COMMUNITY/HABITAT CLASSIFICATION

Natural community names and hierarchical structure follows “The Vegetation Classification and Mapping Program”, *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, September 2003. Note that the aerial photograph shown in Attachment A, Biological Resources Map was taken in June 2006 and significant plant growth has taken place since the time the photo was taken. Therefore, the vegetation signatures on the aerial photo should only be used as general reference.

Chamise Chapparral (3.42 Acres)

The Site is dominated by a chamise chaparral plant community. Dominant plant species in this community include chamise (*Adenostoma fasciculatum*), thicketleaf yerba santa (*Eriodictyon crassifolium*), and toyon (*Herteromeles arbutifolia*). Other subdominant species found throughout this community include Mexican elderberry (*Sambucus mexicana*), purple sage (*Salvia leucophylla*), scrub oak (*Quercus* sp.), and holly-leaf cherry (*Prunus ilicifolia*). The northwestern portion of this community also supports large coast live oak trees (*Quercus agrifolia*). See Attachment A, Biological Resources Map.

Coastal Sage Scrub (3.34 Acres)

The central section of the Site is occupied by a coastal sage scrub plant community. The dominant plants in the community include purple sage, toyon, and California sagebrush (*Artemisia californica*). This community is divided by a north-south trending hill that runs through the majority of the Site. The east-facing slope has been more recently disturbed than the west-facing slope and therefore supports a different sub-dominant community. Sub-dominants on the east-facing slope include species such as black mustard (*Brassica nigra*), Mexican elderberry, beavertail cactus (*Opuntia* sp.), giant rye (*Leymus condensatus*), red-stemmed filaree (*Erodium cicutarium*), milk thistle (*Silybum marianum*), red brome (*Bromus madritensis* ssp. *rubens*), and deerweed (*Lotus scoparius*).

The west-facing slope has received less recent disturbance and therefore is characterized by more dense stands of California sagebrush and toyon than are seen on the east-facing slope. Also, this section of the community supports sub-dominant species such as giant rye, California peony (*Paeonia californica*), chaparral yucca (*Yucca whipplei* ssp. *intermedia*), and scrub oak. See Attachment A, Biological Resources Map.

emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989). Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor", "travel route", "habitat linkage", and "wildlife crossing" to refer to areas in which wildlife moves from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to

SENSITIVE BIOLOGICAL RESOURCES

OVERVIEW OF CLASSIFICATIONS

The following discussion describes the plant and wildlife species, or potentially present within the Site boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by either state or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal Endangered Species Acts. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. CDFG uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFG, the USFWS, and special groups like the California Native Plant Society (CNPS) maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

Plants: U. S. Fish and Wildlife Service (USFWS January 2010), California Department of Fish and Game (CDFG 2010), California Natural Diversity Data Base (CNDDDB 2010), and California Native Plant Society (CNPS) (Skinner and Pavlik 1994),

Wildlife: California Wildlife Habitat Relationships Database System (CWHRDS 1988), USFWS (January 2010), CDFG (2009), CNDDDB (2010), and

Habitats: CNDDDB (2010) and CDFG (2003).

Federal Protection and Classifications

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined as follows in Section 3(18) of the FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of a "take". These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case

Game Commission. Unlike the federal ESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the California Endangered Species Act addresses the taking of threatened or endangered species by stating “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided...” Under the California Endangered Species Act, “take” is defined as “...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require “...permits or memorandums of understanding...” and can be authorized for “...endangered species, threatened species, or candidate species for scientific, educational, or management purposes.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California Species of Special Concern (“special” animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management and U.S. Forest Service sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFG's CNDDDB project. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For the purposes of this assessment, the following acronyms are used for state status species:

SE	State Endangered
ST	State Threatened
SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected
SR	State Rare
CSC	California Species of Special Concern

- Santa Susana Tarplant (*Deinandra minthornii*) SR / List 1B.2
- Slender-horned Spineflower (*Dodecahema leptoceras*) FE / SE / List 1B.1
- Ross' pitcher sage (*Lepechinia rossii*) List 1B.2
- Davidson's bush-mallow (*Malacothamnus davidsonii*) List 1B.2
- Ojai navarretia (*Navarretia ojaiensis*) List 1B.1
- Lyon's pentacheata (*Pentachaeta lyonii*) FE / SE / List 1B.1

Oak Tree and Plant Protection and Management

The Site supports several free-standing coast live oak trees. These individuals are subject to the Los Angeles County Oak Tree Ordinance. The location of these sensitive resources is shown in Attachment A, Biological Resources Map.

Sensitive Wildlife Species

Potentially sensitive species habitat is present within the coastal sage scrub plant community. The following represents those wildlife species that have the potential to occur onsite due to the presence of suitable habitat.

The coastal sage scrub plant community represents suitable habitat for the federally threatened coastal California gnatcatcher (*Poliophtilla californica californica*). This species has been documented approximately 7.6 miles to the east of the Site (CNDDB 2010).

The Site supports plant communities that have the potential to support nesting migratory birds. Impacts to nesting species are prohibited under the Migratory Bird Treaty Act. MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird species listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of certain bird species, their nests or eggs. Removal of vegetation between September 1 and January 31 would likely ensure that there would not be any constraints associated with the MBTA. If this is not possible, it is recommended that a qualified biologist conduct a nesting bird survey(s) within three days of proposed vegetation removal in order to prevent any violations of the MBTA.

CONCLUSIONS

Compliance with all terms and conditions imposed by the regulatory agencies, including the required mitigation activities, must reduce project related impacts to jurisdictional waters and/or sensitive floral and faunal species to a level of less than significant.

JURISDICTIONAL WETLANDS, WATERS, AND STREAMBEDS

The Site does not contain drainage features potentially subject to the jurisdiction of the California Department of Fish and Game, Army Corps of Engineers, or the Regional Water Quality Control Board. A jurisdictional delineation is not necessary to determine the extent of waters located onsite.

OAK TREES

The Site supports several free-standing coast live oak trees. These individuals are subject to the Los Angeles County Oak Tree Ordinance.

SENSITIVE SPECIES / FOCUSED SURVEYS

Based on the results of the general biological resource assessment, the following USFWS/CDFG sensitive species may be found on or adjacent to the Site.

- Nevin's Barberry (*Berberis nevinii*) FE / SE / List 1B.1
- Slender Mariposa-lily (*Calochortus clavatus* var. *gracilis*) List 1B.2
- San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*) FC/SE/List 1B.1
- Parry's Spineflower (*Chorizanthe parryi* var. *parryi*) List 1B.1
- Santa Susana Tarplant (*Deinandra minthornii*) SR / List 1B.2
- Slender-horned Spineflower (*Dodecahema leptoceras*) FE / SE / List 1B.1
- Ross' pitcher sage (*Lepechinia rossii*) List 1B.2
- Davidson's bush-mallow (*Malacothamnus davidsonii*) List 1B.2
- Ojai navarretia (*Navarretia ojaiensis*) List 1B.1
- Lyon's pentacheata (*Pentachaeta lyonii*) FE / SE / List 1B.1
- Coastal California Gnatcatcher (*Polioptilla californica californica*) FT / CSC

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CERTIFICATION

“I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.”

Author: Jonathan E. Campbell Date: February 24, 2010

Fieldwork Performed By: Jonathan E. Campbell



Photo 1. Southern non-native grassland/disturbed plant community, looking south.



Photo 2. Northern non-native grassland/disturbed plant community, looking northeast.

Site Photographs

Attachment B1



Photo 5. Chamise chaparral plant community, looking south.



Photo 6. Coast live oak trees located onsite, looking west.

The Oak Tree Ordinance



The Los Angeles County Oak Tree Ordinance has been established to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened plant heritage. By making this part of the development process, healthy oak trees will be preserved and maintained.

The Los Angeles County Oak Tree Ordinance applies to all unincorporated areas of the County. Individual cities may have adopted the county ordinance or their own ordinance which may be more stringent.

PERMIT REQUIREMENTS:

Under the Los Angeles County Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus, which is 8" or more in diameter four and one-half feet above mean natural grade or in the case of oaks with multiple trunks a combined diameter of twelve inches or more of the two largest trunks, without first obtaining a permit.

Damage includes but is not limited to:

- * burning
- * application of toxic substances
- * trenching
- * pruning or cutting
- * excavating
- * operation of machinery or equipment
- * paving
- * changing the natural grade

Section 22.56.2050: Oak Tree Permit
Regulations, Los Angeles County
Date of Adoption: September 13, 1988.

TYPES OF OAKS COMMONLY FOUND IN LOS ANGELES COUNTY

Many kinds of oak trees are native to Los Angeles County. A few of the more common oaks are shown on the back of this sheet, but all oak species are covered by the oak tree ordinance.

Older oak trees that have thrived under natural rainfall patterns of dry summers and wet winters often cannot tolerate the extra water of a garden setting. These trees must be treated with special care if they are to survive.

Oaks that have been planted into the landscape or have sprouted as volunteers tend to be more tolerant of watered landscapes. While these vigorous young trees may grow 1 1/2 to 4 feet a year in height under good conditions, they are not as long-lived as indigenous oaks.