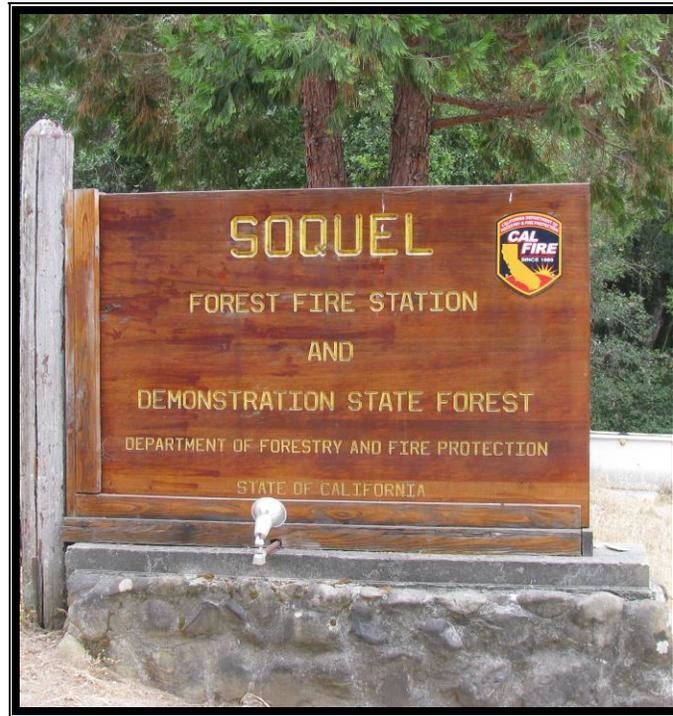


**DRAFT**  
**Initial Study/Mitigated Negative Declaration**  
**for the proposed**  
**Soquel Forest Fire Station Replacement Project**  
**Santa Cruz County, California**



Prepared by:

The California Department of Forestry and Fire Protection  
The Lead Agency Pursuant to Section 21082.1 of the  
California Environmental Quality Act

California Department of Forestry and Fire Protection  
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September 24, 2015

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# MITIGATED NEGATIVE DECLARATION

## Introduction and Regulatory Context

### Stage of CEQA Document Development

- Administrative Draft.** This California Environmental Quality Act (CEQA) document is in preparation by California Department of Forestry and Fire Protection (CAL FIRE) staff.
- Public Document.** This completed CEQA document has been filed by CAL FIRE at the State Clearinghouse and is being circulated for a 30-day agency and public review period. The public review period begins October 16, 2015 and ends on November 16, 2015. Instructions for submitting written comments are provided on Pages 5-6 of this document.
- Final CEQA Document.** This Final CEQA document contains the changes made by the Department following consideration of comments received during the public and agency review period. The changes are displayed in strike-out text for deletions and underlined text for insertions. The CEQA administrative record supporting this document is on file, and available for review, at CAL FIRE's Sacramento Headquarters, Environmental Protection Program, which is located in the Natural Resources Building, 1416 Ninth Street, 15<sup>th</sup> Floor, Sacramento, California.

### Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND<sup>1</sup>) describes the environmental impact analysis conducted for the proposed project. This document was prepared by CAL FIRE staff utilizing information gathered from a number of sources including research and field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to Section 21082.1 of the CEQA, the lead agency, CAL FIRE, has prepared, reviewed, and analyzed the IS/MND and declares that the statements made in this document reflect CAL FIRE's independent judgment as lead agency pursuant to CEQA. CAL FIRE further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in significant adverse effects on the environment.

### Regulatory Guidance

This IS/MND has been prepared by CAL FIRE to evaluate potential environmental effects which could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code §21000 *et seq.*) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq.*).

An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063[a]), and thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines §15070, a "public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The initial study shows that there is no substantial evidence...that the project may have a significant impact upon

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<sup>1</sup> A list and definition of the acronyms and symbols used in this CEQA document is presented on pages 113-116.

the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions will reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). This IS/MND conforms to these requirements and to the content requirements of CEQA Guidelines Section 15071.

### **Purpose of the Initial Study**

CAL FIRE has primary authority for carrying out the proposed project and is the lead agency under CEQA. The purpose of this IS/MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and describe the adjustments made to the project to avoid significant environmental effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public, and reviewing agencies, for review and comment. The IS/MND is being circulated for public and agency review and comment for a review period of 30 days as indicated on the notice of intent to adopt a mitigated negative declaration (NOI). The 30-day public review period for this project begins on October 16, 2015 and ends November 16, 2015.

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require CAL FIRE to notify the general public by utilizing at least one of the following three procedures:

- Publication in a newspaper of general circulation in the area affected by the proposed project,
- Posting the NOI on and off site in the area where the project is to be located, or
- Direct mailing to the owners and occupants of property contiguous to the project.

CAL FIRE has elected to utilize all four notification options. The NOI was posted at four prominent locations on and off site in the area where the project is located for the entire 30-day public review period.

1. Notices were posted on the Soquel Forest Fire Station (FFS) sign, on the door of the Soquel FFS, on the door of the Soquel Demonstration State Forest office and at the Porter Memorial Library.
2. The notice was published in the Santa Cruz Sentinel.
3. The notice was also posted at the Santa Cruz County Clerk/Recorder’s Office in Santa Cruz.

A complete copy of this CEQA document was made available for review by any member of the public requesting to see it at Locations #1 and #3 above. An electronic version of the NOI and the CEQA document were made available for review for the entire 30-day review period through their posting on CAL FIRE’s Internet Web Pages at:

[http://www.fire.ca.gov/resource\\_mgt/resource\\_mgt\\_EPRP\\_PublicNotice.php](http://www.fire.ca.gov/resource_mgt/resource_mgt_EPRP_PublicNotice.php)

If submitted prior to the close of public comment, views and comments are welcomed from reviewing agencies or any member of the public on how the proposed project may affect the environment. Written comments must be postmarked or submitted on or prior to the date the public review period will close (as indicated on the NOI) for CAL FIRE's consideration. Written comments may also be submitted via email (using the email address which appears below) but comments sent via email must also be received on or prior to the close of the 30-day public comment period. Comments should be addressed to:

Christina Snow, Senior Environmental Planner  
California Department of Forestry and Fire Protection  
Technical Services  
P.O. Box 944246  
Sacramento, CA 94244-2460  
Phone: (916) 324-1639  
Email: [sacramentopubliccomment@fire.ca.gov](mailto:sacramentopubliccomment@fire.ca.gov)

After comments are received from the public and reviewing agencies, CAL FIRE will consider those comments and may (1) adopt the mitigated negative declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, CAL FIRE could design and construct all or part of the project.

## **Project Description and Environmental Setting**

### **Background and Need for the Project**

The original Soquel Forest Fire Station buildings were constructed between 1953 and 1956. Later a storage garage and chemical building were constructed, and a mobile unit was placed on the property to house the Soquel Demonstration State Forest office. CAL FIRE purchased the site in 1970. Current buildings onsite include the apparatus-messhall-barracks building, a storage garage, a wash rack storage building, a modular trailer and deck, and an additional storage building.

Since construction of the Soquel Forest Fire Station several operational standards have changed, which renders the current structures inefficient and obsolete. Modern fire engines have become taller and wider to accommodate personnel safety and expanded responsibilities. These modern fire engines cannot fit into the existing apparatus bays. The existing structures onsite are too small and inefficient for modern firefighting crews, and the existing living quarters contain only one restroom with a crew of up to eight adults of different sexes. Design standards have also substantially changed since the station was constructed, and, although there have been regular maintenance improvements, the structures do not provide for a safe and healthy environment for the crew onsite. The structures can no longer accommodate the necessary equipment and staff to carry out CAL FIRE's mission.

The Soquel Demonstration State Forest trailer currently onsite does not provide adequate space for training, public visits or educational classes. The trailer has been in a constant state of repair due to its age and usage. The Soquel Demonstration State Forest, located northeast of the project site, is an important state resource as it provides sustained-yield timber, fish and wildlife habitat, education, research, and recreation for the public and state agencies. Under California Public Resource Code Section 4631, CAL FIRE owns and manages forest lands for the people of

the state to ensure that these lands remain productive, while also protecting the continued viability of the forest. The office-trailer, when fully staffed, has a staff of five and is open year round. Forest staff work with other agencies and the community on a number of forestry, recreational and educational items. Additionally, during the summer months educational classes and training are provided to the community and foresters. The current trailer does not provide adequate support for these activities.

## **Project Objectives**

The new facility will support CAL FIRE's mission to serve and safeguard the people and protect the property and resources within the State Responsibility Areas of the San Mateo-Santa Cruz Unit.

The following are the objectives of the proposed project:

- Replace the existing Soquel Forest Fire Station with a new, modern facility that meets operational requirements.
- To improve CAL FIRE's ability to meet peak demand emergency incident workload through the enhancement of the statewide fire protection system.

## **Project Description**

CAL FIRE proposes to replace the existing Soquel Forest Fire Station with a new modern facility. The project includes the demolition of all existing buildings and appurtenances onsite and construction of a new facility consisting of a one-engine, four-bedroom fire station combined with a mess hall and apparatus building (6,184 sf). Additional project components include a new office-education center for the Soquel Demonstration State Forest (3,000 sf), a generator-pump-storage building (648 sf), masonry trash enclosure ( $\pm$ 150 sf), fuel vaults and tanks, hose wash rack (52-foot by 5-foot), flag pole, radio tower (35 ft.) and two above-ground water storage tanks (eight feet high with approximate diameters of 26 feet and 15 feet).

In addition to the improvements described, the project would include the additional components as follows:

- Site improvements consisting of site grading, paving for road and parking areas, installation of retaining walls, curbs, gutters and sidewalks, storage and distribution systems, wastewater disposal systems, drainage systems and erosion control measures;
- New septic system and leach field;
- Fuel tank and pad;
- A new standard septic system;
- Propane tank;
- New site lighting;
- New site landscaping and irrigation system;

- New perimeter fencing and automatic access gate;
- New underground electrical and telephone distribution systems; and
- New CAL FIRE station sign and platform.

## **Project Region and Description of Local Environment**

The project site is located in the Soquel Creek watershed within the Santa Cruz Mountains approximately six miles northeast of Soquel, California (**Figure 1. Project Vicinity**). Santa Cruz County is located on the coast between the San Francisco Bay area and the Monterey peninsula. The county is characterized by varying topography, consisting of redwood forested mountains, coastal terraces, and alluvial farmland. The northern portion consists of rugged mountain terrain containing redwood and mixed-conifer hardwood forests, while the southern portion is primarily agricultural land. The majority of the population resides in the central portion, near the coastline and beaches (Santa Cruz County 1994). The state owns and maintains six state parks and six state beaches for a total of 42,334 acres in the coastal and mountainous areas of Santa Cruz County (2013a).

The project is located on a 2.6-acre site at 4750 Soquel San Jose Road on Assessor's Parcel Number 103-21-116. The project area consists of steep and rugged forested terrain containing coastal redwood, Douglas-fir, and oaks. Approximately one mile to the east is the Forest of Nisene Marks State Park consisting of approximately 10,000 acres. Immediately north of the Nisene Marks State Park is CAL FIRE's Soquel Demonstration State Forest, which consists of nearly 2,700 acres.

The project site is designated as a Public Facility-Institutional in the Santa Cruz General Plan while adjacent properties are designated as Rural Residential and zoned Rural Agricultural. Parcel sizes surrounding the site range from 2.5 to 20 acres. The existing topography of the site slopes to the southwest and the majority of the site is developed with structures and appurtenances as well as a driveway, graveled area and lawn. Scattered oaks are present around the perimeter, while the eastern portion of the property contains native vegetation and oak woodland.

Figure 1. Project Vicinity Map

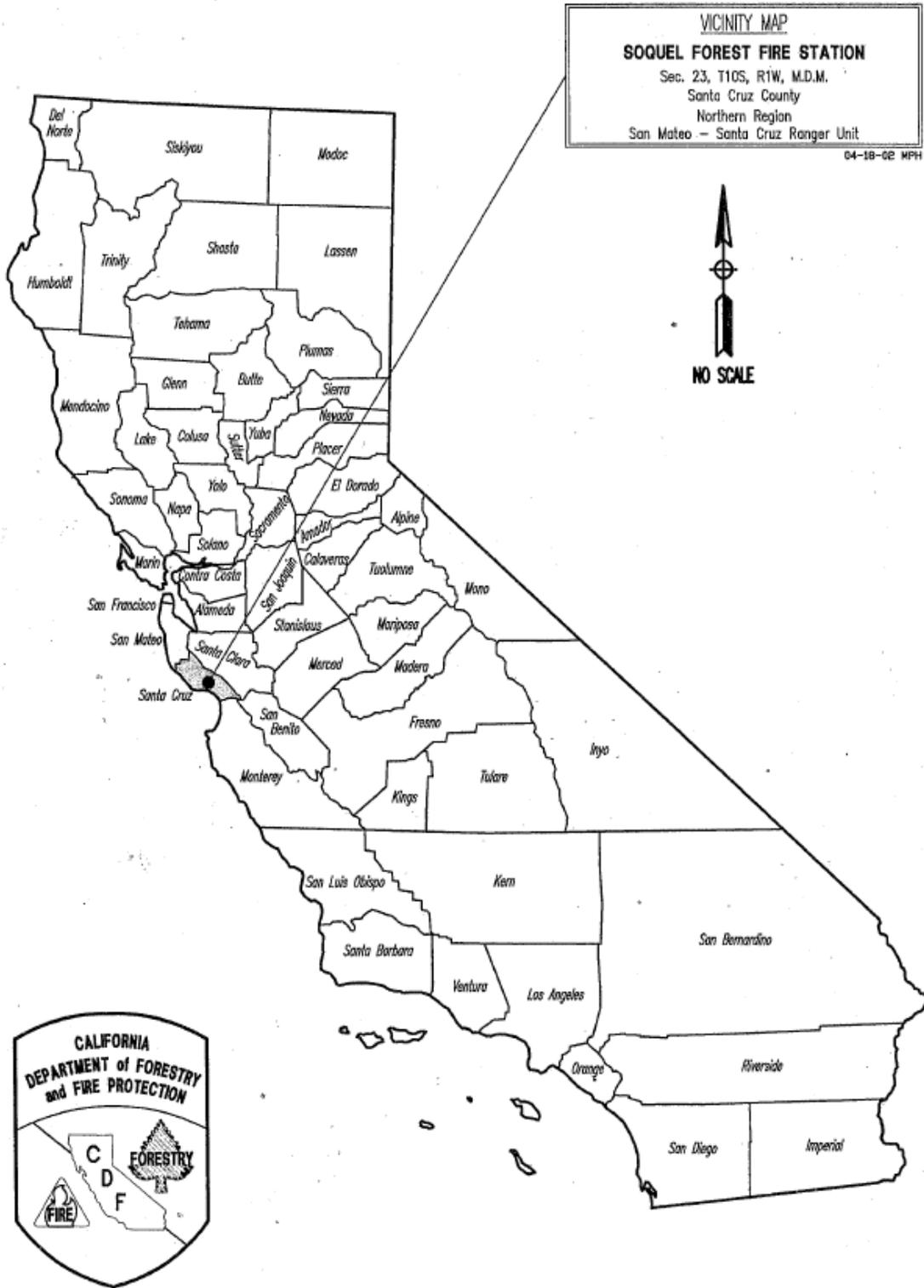


Figure 2. Project location Map

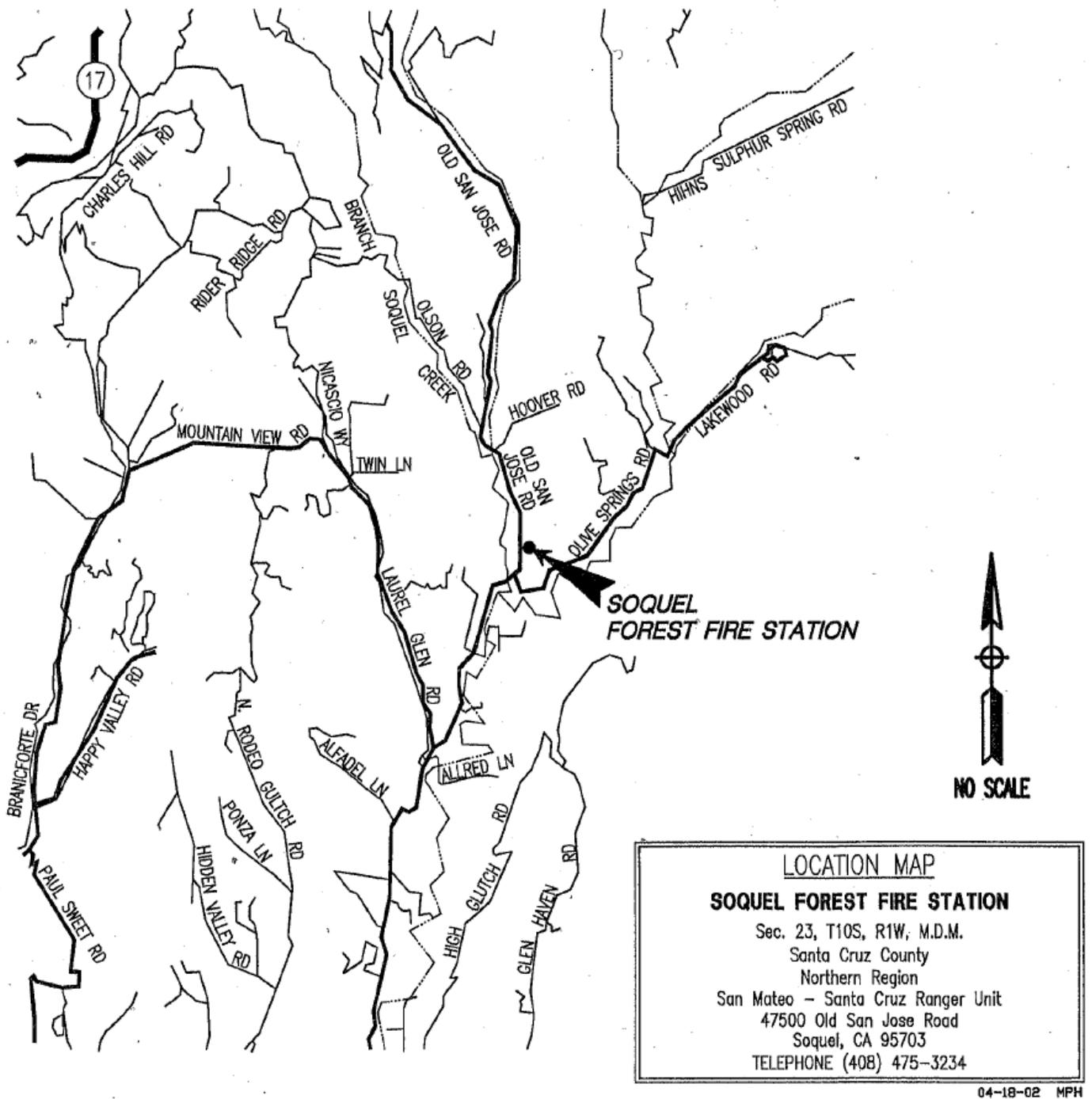


Figure 3. Soquel FFS Building



Figure 4. SDSF Office Trailer



Figure 5. Well Pump Building



Figure 6. Gas and Oil House



Figure 7. Storage Building



Figure 8. Garage (Storage)



Figure 9. Driveway



Figure 10. Rural residence directly across roadway from Soquel FFS



Figure 11. Redwood Trees to be removed along northern property line

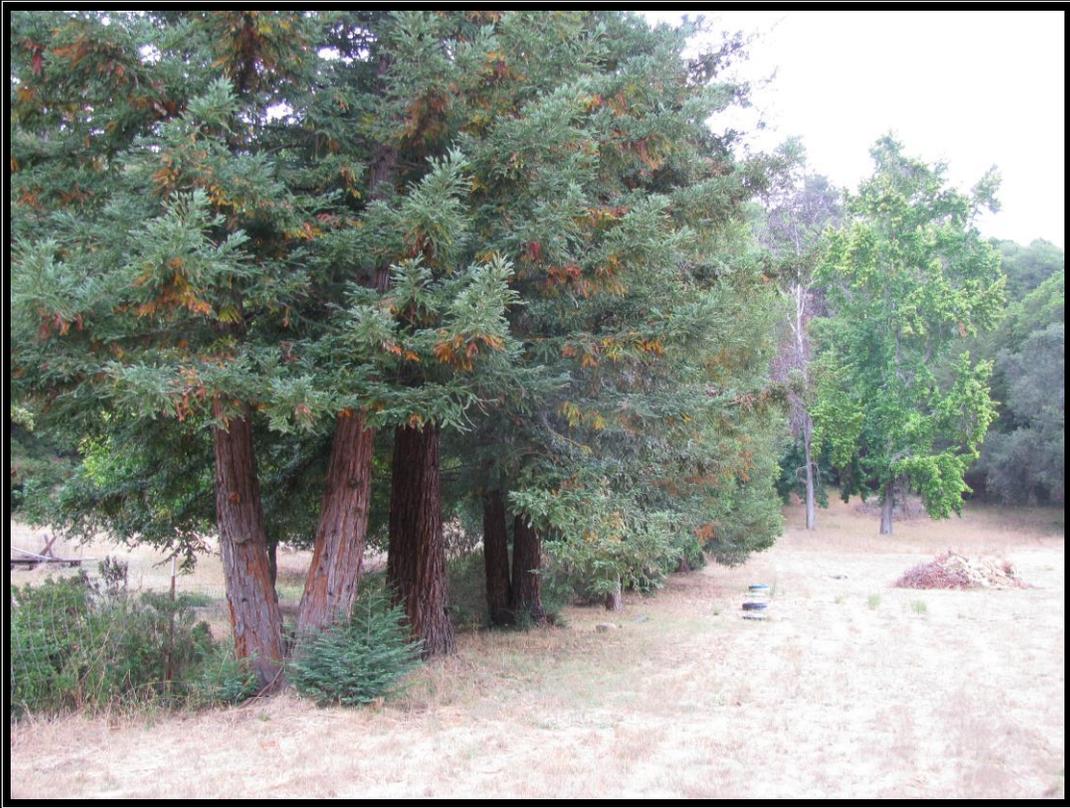


Figure 12. Adjacent rural residence near northern property line



Figure 13. Eastern portion of project site

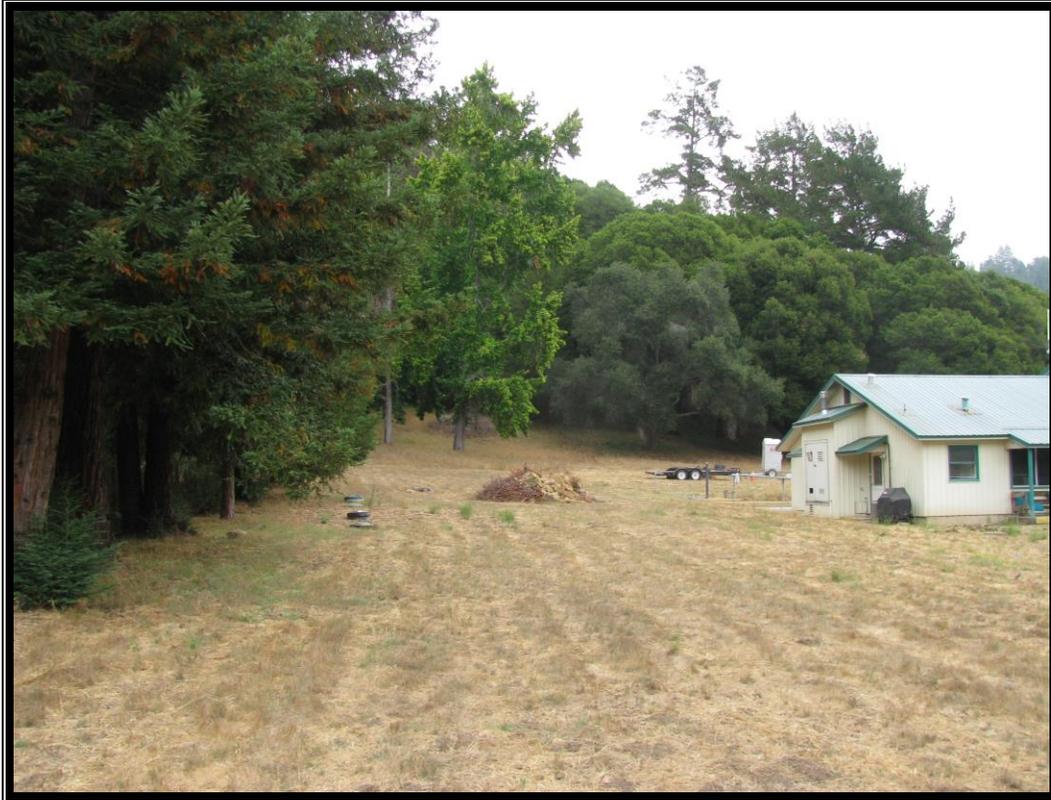


Figure 14. Parking area in eastern portion of the project site



Figure 15. Frontage of project site where new retaining wall will be constructed



Figure 16. Adjacent rural residence on southern property boundary



Figure 17. Residence located along eastern property boundary



Figure 18. Existing water tank located in the northeastern portion of the property



Figure 19. Oak woodland area located in the eastern portion of the property



Figure 20. Oak trees to be removed in the northwest corner



Figure 21. Trees to be removed within the southern portion of the site



## **Conclusion of the Mitigated Negative Declaration**

### **Regulatory Requirements, Permits and Approvals**

The proposed Project may require the following environmental permits and CAL FIRE may be required to comply with the following state regulations:

1. Road Encroachment Permit from Santa Cruz County. The project will require road work along the driveway and will obtain the proper encroachment permit from the Department of Public Works.
2. National Pollutant Discharge Elimination System Permit (NPDES) – issued by the State Water Resources Control Board (SWRCB).
3. Storm Water Construction General Permit (including the development and implementation of a Storm Water Pollution Prevention Plan – issued by the SWRCB.
4. Authority to Construct permit and Permit to Operate (for the generator and fuel tanks) – issued by the Monterey Bay Unified Air Pollution Control District (MBUAPCD).
5. State Fire Marshal Review Approval
6. State Architect Approval for Americans with Disabilities Act (ADA) and structural review by the Department of the State Architect (DSA).
7. Storm Water Pollution Control Plan (SWPCP) – reviewed by Santa Cruz County Department of Public Works.
8. Monterey Bay Unified Air Pollution Control District – Asbestos NESHAP Notification; written notification for Rule 424, ten days prior to demolition for asbestos notification.
9. Monterey Bay Unified Air Pollution Control District – Air District Rule 439, Building Removals: to limit particulate emissions when demolishing buildings.
10. Monterey Bay Unified Air Pollution Control District – Air District Rule 400, Visible Emissions: to manage dust during construction; and
11. Monterey Bay Unified Air Pollution Control District – Air District Rule 402, Nuisances: to manage dust during construction.

### **Mitigation Measures**

The following 16 mitigation measures will be implemented by CAL FIRE to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

### **Mitigation Measure #1: AES-1 Retaining Walls**

The retaining walls constructed onsite shall be tan in color and split faced to provide texture in accordance with Santa Cruz County's Site, Architectural and Landscape Design Review Ordinance.

### **Mitigation Measure #2: AES-2 Landscaping**

In accordance with Santa Cruz County's Site, Architectural and Landscape Design Review Ordinance landscaping shall be used to soften the visual impact of buildings, walls and other site improvements. Trees, shrubs and vine species shall be used which offer variety of shapes and sizes with an emphasis on drought tolerant (water efficient), native plant materials. Shrubs shall be a minimum of five gallon in size and trees shall be a minimum of 15-gallon in size. Plantings shall be of vegetative character of the surrounding area to the extent possible and shall be sufficient to provide screening when mature.

### **Mitigation Measure #3: AES-3 Lighting**

Prior to construction, a lighting plan for the project site specifying the location and type of exterior light sources shall be prepared by CAL FIRE. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the northern and southern boundary of the Soquel Forest Fire Station property.

### **Mitigation Measure #4: BIO-1 Pre-Construction Nesting Survey**

1. Conduct a pre-construction nesting bird survey of all suitable habitat on the project site within 7 days prior to the commencement of construction during the nesting season (February 1 through August 31).
2. If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist (or forester) in accordance with CDFW recommendations for buffer distances relative to the species identified. Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to detect any behavior changes as a result of construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist (or forester). No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nesting tree. Once the young are independent of the nest, no further measures are necessary and construction may commence. Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through January 31).

### **Mitigation Measure #5: Mitigation Measure CUL-1 Ground Disturbance Monitoring**

CAL FIRE shall ensure that ground disturbance is monitored during subsurface excavations, demolition and removal of the buildings, and grading of the project site. This work will be performed by a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist. This work shall be done by a CAL FIRE or other professional archaeologist working in close consultation with

a CAL FIRE archaeologist. The CAL FIRE staff archaeologist shall determine the timing and duration of the required monitoring.

Should subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt and the professional archaeologist shall evaluate the significance of the find. If the archaeologist determines that the resource is significant, an evaluation and development of appropriate recommendations for conservation and management shall be prepared in consultation with appropriate experts.

**Mitigation Measure #6: CUL-2 Accidental Discovery**

In the event that evidence of human remains is discovered, construction activities shall be halted and a CAL FIRE archaeologist, the Santa Cruz County Coroner and the Native American Heritage Commission are to be notified of the discovery. If the coroner determines that the remains are Native American, the coroner must contact the California NAHC. CEQA Guidelines, Public Resources Code Section 5097.94 and Section 7050.5 of the Health and Safety Code specify procedures to be followed in the event of discovery of human remains on non-federal land. Upon request, the NAHC will provide a list of most likely descendants, who will specify treatment and disposition of any Native American remains found within the area of APE for the project.

**Mitigation Measure #7: HAZ-1 Notification to the Monterey Bay Unified Air Pollution Control District**

CAL FIRE shall submit a NOTIFICATION OF DEMOLITION AND RENOVATION form to the Monterey Bay Unified Air Pollution Control District at least 30 days prior to demolition activities.

**Mitigation Measure #8: HAZ-2 Demolition Requirements**

Demolition activities shall be performed under the direction of an Independent State Certified Asbestos Consultant with oversight performed by a State Certified Site Surveillance Technician. All materials shall be disposed of at an approved facility licensed to handle such waste.

**Mitigation Measure #9: HAZ-3 Notification to Contractors and Building Occupants**

In accordance with OSHA Construction Asbestos Standards, CAL FIRE shall notify the following persons of the presence, location and quantity of asbestos or material presumed to contain asbestos at any concentration, at the work sites in their buildings and facilities:

1. Prospective contractors applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;
2. Employees who will work in or adjacent to areas containing such material;
3. All employers of employees who will be performing work within or adjacent to areas containing such materials; and
4. CAL FIRE staff who occupy areas containing such material or will be overseeing work conducted onsite.

**Mitigation Measure #10: HAZ-4 OSHA Pre-job Notification**

In accordance with California Code of Regulations (CCR), Title 8, Section 1532.1(e), the contractor shall provide a written Pre-job Notification to the nearest Cal/OSHA office within 24 hours of the start of work.

### **Mitigation Measure #11: HAZ-5 Universal Waste**

In accordance with California's Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 23) and DTSC, the following shall be implemented:

1. Fluorescent light tubes shall be removed and managed for recycling.
2. Light ballasts that are unlabeled, or lacking a "No PCB's" designation on their labels, shall be removed from the light fixtures and managed as a hazardous waste.
3. Fuels and other highly flammable materials (solvents, paints, etc.) shall be stored in approved combustible storage cabinets.
4. Storage drums shall be stored on secondary (spill) containment pallets with spill kits (e.g. absorbent, berms, wipes, etc.) readily accessible in drum and fuel storage areas.
5. Removal of universal wastes or suspect hazardous materials from the project site for recycling or disposal shall be conducted by contractors licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.

### **Mitigation Measure #12: NOISE-1 Construction Noise Reduction**

1. Construction shall be limited to the hours of 7:00 am and 8:00 pm on weekdays.
2. Exceptions to the specified construction hours shall be allowed only for construction emergencies and when requested by the Department of Public Works and approved by the County Planning Department.

### **Mitigation Measure #13: TRAF-1 Vegetation**

Prior to operation of the new Soquel FFS, CAL FIRE shall contact Santa Cruz County to identify and remove trees and vegetation within the public right of way that interfere with corner sight distance to the south.

### **Mitigation Measure #14: TRAF-2 Road Improvement Plans**

Prior to construction of the proposed project, the road improvement plans must meet the minimum site distance requirement established by Santa Cruz County.

### **Mitigation Measure #15: TRAF-3 Acceleration and Deceleration**

Prior to construction of the proposed project, the road improvement plans shall provide for an 8-foot wide paved shoulder along the northbound lane to the driveway apron for safe deceleration and turning movements onto the project site.

### **Mitigation Measure #16: TRAF-4 Turn Radius**

Prior to construction of the proposed project, the road improvement plans shall provide an appropriate curb radius along the north side of the driveway consistent with applicable Caltrans and Santa Cruz County traffic engineering standards (*County of Santa Cruz Design Criteria, Containing Standards for the Construction of Streets, Storm Drains, Sanitary Sewers, Water Systems, Driveways. June 2014*).

## Summary of Findings

This IS/MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS/MND, it has been determined that the proposed Project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project will have no effect related to Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.
2. The proposed project will have a less than significant impact on Greenhouse Gas Emissions, Hydrology and Water Quality, and Utilities and Service Systems.
3. Mitigation is required to reduce potentially significant impacts related to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Noise, Transportation and Traffic and Mandatory Findings of Significance.

The initial study-environmental checklist included in this document discusses the results of resource-specific environmental impact analyses, which were conducted by the Department. This initial study revealed that potentially significant environmental effects could result from the proposed project; however, CAL FIRE revised its project plans and has developed mitigation measures that will eliminate impacts or reduce environmental impacts to a less than significant level. CAL FIRE has found, in consideration of the entire record, that there is no substantial evidence that the proposed project, as currently revised and mitigated, would result in a significant effect upon the environment. The IS/MND is therefore the appropriate document for CEQA compliance.

## INITIAL STUDY/ENVIRONMENTAL CHECKLIST

<b>PROJECT INFORMATION</b>					
1. Project Title:	Soquel Forest Fire Station Replacement Project				
2. Lead Agency Name and Address:	California Department of Forestry and Fire Protection P.O. 944246 Sacramento, CA 94244-2460				
3. Contact Person and Phone Number:	Christina Snow 916-324-1639				
4. Project Location:	4750 Soquel San Jose Road, Santa Cruz County				
5. Project Sponsor's Name and Address:	N/A (CAL FIRE is project sponsor and lead agency)				
6. General Plan Designation:	Public Facility				
7. Zoning:	Residential Agricultural				
8. Description of Project: See Pages 6-8 of this document					
9. Surrounding Land Uses and Setting:	Refer to page 69-70 of this document				
10: Other public agencies whose approval may be required:	See page (s) 21 of this document				
<b>ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:</b>					
<p>The environmental factors checked below are the ones which would potentially be affected by this proposed project and were more rigorously analyzed than the factors which were not checked. The results of this analysis are presented in the detailed Environmental Checklist which follows.</p>					
<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry Resources	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology / Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards & Hazardous Materials	<input type="checkbox"/>	Hydrology / Water Quality
<input type="checkbox"/>	Land Use / Planning	<input type="checkbox"/>	Mineral Resources	<input checked="" type="checkbox"/>	Noise
<input type="checkbox"/>	Population / Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input checked="" type="checkbox"/>	Transportation / Traffic	<input type="checkbox"/>	Utilities / Service Systems	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

**DETERMINATION**

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.



10/15/15

Duane Shintaku, Deputy Director,  
Resource Management  
Department of Forestry and Fire  
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P.O. Box 944246  
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Date Signed

# ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS

## *Aesthetics*

### ***Environmental Setting***

The project site is located within the Soquel watershed on the western slope of the Santa Cruz Mountains, approximately 4.5 miles north of the town of Soquel. Typical habitat communities include grassland, scrub, chaparral, woodland and forest riparian areas. The 2,681-acre Soquel Demonstration State Forest (SDSF), owned and maintained by CAL FIRE, is located approximately two miles northeast of the Soquel Forest Fire Station (FFS). Vegetation types within the SDSF consist of redwood, montane hardwood-conifer, coastal oak woodland, Douglas-fir, mixed chaparral, annual grassland, riparian communities and freshwater marshes. The Forest of Nisene Marks State Park borders the SDSF on the south and is approximately one mile east of the Soquel FFS. Other properties that border the SDSF include timberland managed by Redwood Empire, the Olive Springs Quarry, and private rural-residential parcels that range in size from 1 to 80 acres.

The immediate area surrounding the project site is dominated by mixed oak woodland with rural residential development. The project site consists of 2.6 acres that sits on a low terrace on the west side of Soquel Creek. The terrain gradually rises from the stream channel to this terrace and then becomes steep to the east past the buildings onsite.

The western portion of the property slopes gradually from the roadway, while the eastern portion of the project site contains a steep southwest facing slope containing woodland and forest. The western portion of the project site is currently developed with a combined apparatus-messhall-barracks building, a well pump house, a gas and oil house, a storage garage, a chemical building, and a mobile trailer that is used as an office for the SDSF. The project site is accessed from Soquel San Jose Road, a winding rural road.

### ***Discussion***

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project is currently developed and is surrounded by rural residential development. The proposed project would not directly impact any public scenic resources, as designated in the county's General Plan (1994), or obstruct views of these visual resources. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The California Department of Transportation (Caltrans) has designated certain highways throughout California as state scenic highways. In addition, Caltrans also identifies those highways that are eligible for state scenic designation throughout the state. State Highways 1, 9, 17, 35, 129, 152, and 236 in Santa Cruz County are considered eligible for designation. The project site is not located on or adjacent to any of these highways. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project consists of the replacement of the existing forest fire station and associated accessory structures. A new education building will be constructed near the front portion of the property. As part of the replacement project new retaining walls will be constructed in the front portion of the parcel and along a portion of the northern and southern sides. The retaining walls are necessary as the site is very narrow and there is only a portion of the site that is buildable due to moderate and steep elevation changes. Currently, the front of the parcel is covered with non-native grass, has a chain link fence and no structures other than the station sign (Figure 15).

The front retaining wall will sit back from the roadway approximately 30 feet and will be eight feet in height and 97 feet in length. The northern retaining wall will be graduated from 10 to 6 feet in height by 100 feet in length and the southern retaining wall will be 6 feet high by 85 feet in length.

Santa Cruz County has a Site, Architectural and Landscape Design Review Ordinance (Chapter 13.11) that is applied to discretionary projects that are under their jurisdiction. Although CAL FIRE does not need to obtain any discretionary approvals from the county, consideration is given to the Santa Cruz General Plan (1994) and the applicable ordinances. The Site, Architectural and Landscape Design Review Ordinance indicate the following:

Views

- Development shall protect the public viewshed, where possible.
- Development should minimize the impact on private views from adjacent parcels, wherever practicable.

## Screening, Fences and Walls

- When landscaping is required to screen views of a site or site uses, the plant material shall be appropriately sized and spaced so that a dense screen grows in a short period of time and views of objects on the opposite side are effectively screened.
- All shrubs used for screening purposes shall be a minimum of five-gallon when planted.
- A fence or wall, when required as a screening device, shall be of solid wood or masonry, or other material, modulated and landscaped where appropriate to provide visual relief from continuous wall or fence surfaces.

## Plant Material Type, Size and Growth

- Invasive species such as acacia pampas grass, broom, etc., should not be used and should be eliminated if already planted.
- Landscaping shall be provided in sufficient size and quantity to adequately screen and soften the effect of new building planes and asphalt within the first year of growth.
- All trees planted shall be a minimum of 15-gallon size. Larger specimens may be required, e.g., 24-inch box or field specimens, depending upon the scale of the proposed project. The trees shall have been grown to the minimum nursery standards for tree height, caliper and canopy for the container size and tree species specified.

## Landscaping

- The required yard (setback) adjoining a street shall incorporate appropriate landscape and/or hardscape. Appropriate landscape elements may include trees, shrubs, and groundcover. Appropriate hardscape materials may include brick or other modular pavers; stamped or textured concrete; or colored concrete and shall create useable exterior space appropriate to the site and buildings.

The project is within a rural residential area and split rail fences are common, which lend to the open nature of the area. A new eight foot retaining wall would change the visual character of the site as it would extend across the majority of the project frontage that faces Soquel San Jose Road. The residence directly across the road would have a visual line of site to the new wall and the motorists within the community would also see the wall as they pass through the area. The two walls along the northern and southern perimeter would also be visible by the neighbors on either side of the project site.

The following mitigation measures shall be implemented to reduce potentially adverse effects as a result of the retaining walls. With incorporation of Mitigation Measures A-1 and A-2, impacts would be less than significant.

### **Mitigation Measure AES-1 Retaining Walls**

The retaining walls constructed onsite shall be tan in color and split faced to provide texture in accordance with Santa Cruz County's Site, Architectural and Landscape Design Review Ordinance.

**Mitigation Measure AES-2 Landscaping**

In accordance with Santa Cruz County’s Site, Architectural and Landscape Design Review Ordinance landscaping shall be used to soften the visual impact of buildings, walls and other site improvements. Trees, shrubs and vine species shall be used which offer variety of shapes and sizes with an emphasis on drought tolerant (water efficient), native plant materials. Shrubs shall be a minimum of five gallon in size and trees shall be a minimum of 15-gallon in size. Plantings shall be of vegetative character of the surrounding area to the extent possible and shall be sufficient to provide screening when mature.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As indicated in the environmental setting above, the site is developed with a forest fire station, trailer (office), and accessory structures which have nighttime lighting. Replacement of the new buildings will not create an adverse impact on day views in the area. The new facilities onsite will have nighttime lighting installed that will not be substantially different than current conditions. The nearest sensitive receptors include single family rural residences adjacent to the project site directly to the north and south. The parking area will likely require some additional lighting, however, the additional lighting will adhere to Title 24, Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Part 6) exterior lighting requirements which include:

- 1) All outdoor luminaries will follow the Backlight, Uplight and Glare (BUG) requirements. In addition, all lighting areas luminaires (parking lot) will be provided with a full cut off house side shield.
- 2) All outdoor luminaries with bottoms less than 24 feet above finished grade will be controlled by a motion sensor so when the area is unoccupied there is a 40%-80% power reduction and will be equipped with auto functionality.

In order to minimize light spillage onto the adjacent residential properties located along Soquel San Jose Road, a lighting plan shall be developed describing specific measures regarding light shielding. Implementation of AES-1 would reduce potential adverse impacts to a less than significant level.

**Mitigation Measure AES-3 Lighting**

Prior to construction, a lighting plan for the project site specifying the location and type of exterior light sources shall be prepared by CAL FIRE. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the northern and southern boundary of the Soquel Forest Fire Station property.

## Agriculture and Forest Resources

### Environmental Setting

The project site is designated as Public Facility/Institutional (1994 General Plan and Local Coastal Program for the County of Santa Cruz) and zoned Rural Agricultural (RA). The project site consists of 2.6 acres, and the proposed project would be built within the property boundaries. Surrounding properties are designated Rural Residential and zoned RA and range in size from 2.5 to 20 acres. The project site is not designated as agricultural and has never been used for agricultural purposes. Surrounding Rural Agriculture sites allow for rural types of agricultural operations such as barns, stables, paddocks, hutches and coops. Other allowable agricultural uses allowed include specialty crops, on-site retail sales of agricultural production, beekeeping, gardening, greenhouses, nurseries, animal keeping and raising, and kennels.

The project site is developed with a forest fire station and associated appurtenant structures. Scattered trees consisting of oaks, redwoods and cedars occur throughout the western portion of the site. The eastern portion of the site contains a much more dense mixture of oaks (Shreve and valley) and associated understory.

a) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The California Farmland Mapping and Monitoring Program (FMMP), Santa Cruz County Important Farmland 2012 map designated the project site as Other Land. Other Land is land not included in any other mapping category and includes such lands as low density rural developments, brush, timber, wetland, riparian areas, confined livestock, poultry and other similar uses. The project is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the FMMP and therefore would not convert such farmland to non-agricultural use. No impact would occur.

b) Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is not located within an agricultural use zone. As indicated, the property is zoned RA and is not under a Williamson Act contract. No impact would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As described, the project is zoned RA and is not zoned as timberland. The site does not contain timberland resources and is not capable of timberland production. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in the environmental setting above, the site contains an oak woodland area on the eastern portion of the site and scattered trees throughout the rest of the site. The site does not contain forest land and the project would not result in the conversion of such land. No impact would occur.

e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site does not contain farmland or forest land and the proposed project would not result in the conversion of such lands. The area surrounding the site is rural residential and although some residences may be actively involved in agriculture activities, the proposed project is replacing an existing use that has been onsite for over 50 years and would not impact those activities. No impact would occur.

## Air Quality

### Environmental Setting

The proposed Project is within the North Central Coast Air Basin and is under the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). The air quality within the district is also regulated by the State Air Resources Board and the federal Environmental Protection Agency. Each agency develops rules, regulations, policies, and/or goals to attain the goals or directives that are imposed through legislation.

The project site is an area that is designated as nonattainment for the state ozone standard and designated attainment or unclassified for the national ozone standard. The county is designated nonattainment for the state inhalable particulate matter smaller than 10 microns in diameter (PM<sub>10</sub>), and designated attainment for the national PM<sub>10</sub> standard. Santa Cruz County is designated either attainment or unclassified for the remaining national and state air quality standards. Table 1 provides a summary of both the state and national attainment status for criteria pollutants for MBUAPCD.

**Table 1. State and National Attainment Status for the MBUAPCD**

Criteria Pollutant	State Standards	National Standards
Ozone	Nonattainment	Attainment/Unclassified
Inhalable Particulate Matter (PM <sub>10</sub> )	Nonattainment	Attainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Attainment	Attainment/Unclassified
Carbon Monoxide	Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment	Attainment/Unclassified
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment/Unclassified

Source: MBUAPCD 2013

### CONSTRUCTION-RELATED EMISSIONS

Implementation of the Soquel FFS Replacement project would result in construction activity, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of PM<sub>10</sub> and PM<sub>2.5</sub>. The operation of construction equipment results in exhaust emissions, which include reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>). Construction activity could also potentially entrain asbestos, if present in the soil or structures that would be demolished.

### SIGNIFICANCE THRESHOLDS

#### Construction-Related Emissions

Significance thresholds applied to construction-related emissions are from the MBUAPCD document *CEQA Air Quality Guidelines* (2008). Consistent with Table 5-1 of the guidelines, construction related PM<sub>10</sub> emissions are considered a significant impact if implementation of the proposed project would generate PM<sub>10</sub> emissions exceeding 82 pounds per day (ppd).

As noted in Section 5.3 of the *CEQA Air Quality Guidelines*, ozone precursor emissions (i.e., ROG and NO<sub>x</sub>) "are accommodated in the emission inventories of State- and federally-required

air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS.” Therefore, construction-related ROG and NO<sub>x</sub> emissions are not addressed.

### Asbestos

Naturally occurring asbestos has been identified as a toxic air contaminant by the ARB. No quantitative significance thresholds have been set for the naturally occurring asbestos (NOA). However, the California Department of Conservation provides a map that may be used as a screening-level indicator of the likelihood of NOA being present on the project site. If a project site is located outside of all the areas considered to be more likely to contain NOA, it may be considered to have a relatively lower probability of containing NOA and would be considered to have a less than significant impact (KDA 2015).

The buildings onsite are approximately 60 years old and, therefore, may have the potential to contain asbestos. The uncontrolled release of asbestos fibers during demolitions activities would be considered a significant impact.

### Local Carbon Monoxide (CO) Impacts

The potential impact of the proposed project on local CO levels was assessed by applying screening procedures described in the *CEQA Air Quality Guidelines* (MBUAPCD 2008) and then, if indicated by the screening procedures, conducting detailed microscale air quality dispersion modeling. The screening procedure focuses on the effects of the project on traffic congestion that would elevate CO concentrations. The following would represent a potentially significant impact to intersections or road segments after mitigation (references are to peak-hour level of service [LOS]):

- Intersections or road segments that operate at LOS D or better that would operate at LOS E or F with the project’s traffic, or
- Intersections or road segments that operate at LOS E or F where the volume-to-capacity ration would increase 0.05 or more with the project’s traffic, or
- Intersections that operate at LOS E or F where the delay would increase by 10 seconds or more with the project’s traffic, or
- Unsignalized intersections that operate at LOS E or F where the reserve capacity would decrease by 50 or more with the project’s traffic. This criterion is based on the turning movement with the worst reserve capacity, or
- Project would generate substantial heavy duty truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of CO.

If any of these scenarios would occur, carbon monoxide modeling should be undertaken to determine if indirect source emissions would cause an exceedance of state or national air ambient air quality standards (NAAQS) at existing or reasonably foreseeable receptors.

Projects that would meet these criteria are considered to have the potential for resulting in a significant CO air quality impact. According to the *CEQA Air Quality Guidelines*, detailed

dispersion modeling is not needed for projects that do not meet these criteria and projects that do not meet this criterion are considered to have a less than significant CO air quality impact.

**Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The *CEQA Air Quality Guidelines* (MBUAPCD 2008) references CEQA Guidelines §15125(b), which requires a discussion about consistency between the proposed project and the applicable regional plans, including the Air Quality Management Plan (AQMP). In order to determine consistency the *CEQA Air Quality Guidelines* indicates the following:

“Consistency of indirect emissions associated with a commercial, industrial or industrial projects intended to meet the needs of the population as forecast in the AQMP is determined by comparing the estimated current population of the county in which the project is to be located with the applicable population forecast in the AQMP. If the estimated current population does not exceed the forecasts, indirect emissions associated with the project are deemed to be consistent with the AQMP.”

The California Department of Finance estimated 2015 population in Santa Cruz County of 271,646 is lower than the *CEQA Air Quality Guidelines* forecasts of 275,396 in 2010 and 292,695 in 2020. Therefore, based on significance thresholds presented in the *CEQA Air Quality Guidelines*, the proposed Project would be consistent with the AQMP. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project’s air quality impacts are attributed to short-term demolition and construction-related activities and long-term operational activities. The emissions were estimated using the CalEEMod emissions modeling program. The proposed project would be considered to result in significant air quality impacts if it would result in emissions greater than the significance thresholds identified in the environmental setting section.

## **Construction Impacts**

### Emissions and Fugitive Dust

Implementation of the proposed project would result in demolition and construction activity that would contribute to pollutant emissions. Demolition and construction activities such as bulldozing, grading, excavation and travel on unpaved surfaces would generate dust that could elevate concentrations of PM<sub>10</sub> and PM<sub>2.5</sub>. The operation of construction equipment results in exhaust emissions, which include ROG and NO<sub>x</sub>. Demolition and construction activity could also potentially entrain asbestos if present in the soils or structures. In addition to the following the Monterey Bay Unified Air Pollution Control District rules listed below, Mitigation measures identified in the **Hazards and Hazardous Material Section XIII** would reduce impacts to less than significant.

The project would be required to comply with the following applicable Air District Rules:

- Air District Rule 439, Building Removals: to limit particulate emissions when demolishing buildings.
- Air District Rule 400, Visible Emissions: to manage dust during construction; and
- Air District Rule 402, Nuisances: to manage dust during construction.

Based on application of the CalEEMod model, construction of the project would be expected to generate 0.80 ppd of PM<sub>10</sub> emissions during both a summer day and a winter day. This amount is less than the MBUAPCD significant threshold of 82 ppd. Therefore, this impact is considered to be less than significant.

### Asbestos

The California Department of Conservation map that shows general locations of asbestos in California indicates that there are no areas more likely to contain NOA in the vicinity of the proposed project. The area nearest to the proposed project site that is more likely to contain NOA is approximately five miles away, in the vicinity of Lake Elsmar in Santa Clara County. Therefore, the project site is considered to have a low probability of containing NOA, and this impact is considered less than significant.

Under existing regulations, demolition of structures containing asbestos is governed at both the local and federal levels. At the local level, MBUAPCD Rule 424 describes the district's enforcement authority for the federal National Emission Standards for Hazardous Air Pollutants (40 CFR Parts 61 and 63). Rule 424 specifically incorporates by reference 40 DFR Part 61 Subpart M, *National Emission Standard for Asbestos*, which describes requirements for controlling asbestos during demolition activities. Compliance with MBUAPCD Rule 424 and 40 CFR Part 61 Subpart M during demolition activities would control the potential release of asbestos fibers, and would reduce this impact to a less than significant level. **Section XIII, Hazards and Hazardous Materials** identifies mitigation measures to be implemented to reduce air quality impacts to a less than significant level.

### **Long-Term Operational Impacts**

The proposed project would replace the existing Soquel FFS facilities. The project would not increase capacity or change the amount of vehicle travel to and from the site. Therefore the

proposed project would not change the amount of long-term operational emissions associated with the project site. The long-term operational emissions are considered less than significant.

**Local Carbon Monoxide Impacts**

The traffic analysis of the proposed project concluded that Soquel San Jose Road operates at LOS D during peak traffic hour, and this LOS would not change with implementation of the proposed project. Based on Section 5.4 of the *CEQA Air Quality Guidelines*, the proposed project is not considered to have the potential for resulting in a significant CO air quality impact. Therefore, this impact is considered less than significant.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As described in the environmental setting, the project area is designated a state nonattainment area for ozone, and a federal attainment or unclassified area for ozone, and is designated a nonattainment area for inhalable matter smaller than 10 microns in diameter (PM<sub>10</sub>).

As stated in item (b), the proposed project would not exceed the MBUAPCD significance threshold of 82 ppd of construction-related PM<sub>10</sub> emissions. Additionally, the state- and federally-required air plans account for ozone precursor emissions (i.e., ROG and NO<sub>x</sub>). Therefore, the project would not have a significant impact on attainment and maintenance of ozone AAQS. As the project would not result in a significant impact, it is not considered to result in a cumulatively considerable net increase in ozone and PM<sub>10</sub>. Therefore, this impact is considered less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Air quality regulators typically define sensitive receptors as schools (preschool – 12<sup>th</sup> grade), hospitals, resident care facilities, residences, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. A project would have a significant impact on a sensitive receptor if it would result in an unacceptable health risk due to exposure of toxic air contaminant (TAC) emissions. The Air Quality Study examined the Project for emissions of the TAC asbestos (NOA and demolition of structures containing asbestos). There are nearby residences to the north and south that could be impacted by demolition of structures that contain asbestos. The Monterey Unified Air

Pollution Control District Rules listed in (b) shall be followed and mitigation measures contained in the **Hazards and Hazardous Materials Section XIII** will ensure that impacts to residents nearby will be less than significant.

As stated in item a) the Project site is not located in an area considered likely to contain NOA. Additionally, construction emissions of PM<sub>10</sub> would be temporary and would be less than the MBUAPCD significance threshold of 82 ppd of construction-related PM<sub>10</sub>. Therefore, the proposed Project would not expose sensitive receptors to substantial pollution concentrations. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Construction of the proposed Project could result in minor amounts of odor associated with diesel heavy equipment exhaust. However, construction equipment would be operating at various locations throughout the Project site, and construction activities near sensitive receptors would be temporary. Additionally, long-term operations of the new facilities would not include large amounts of heavy equipment exhaust that could potentially produce odor. Any odor produced by the Soquel FFS operations would be minimal and be contained onsite. Therefore, a less than significant impact would occur.

## **Biological Resources**

A Biological Resources Assessment (BRA) was prepared for the proposed project by CAL FIRE staff in April 2015. A botanical survey was conducted by Dylan Neubauer (botanical consultant) on April 14, 2015. The survey identified 109 species of plants down to the appropriate taxonomic level to determine their listing status. Of these 109 plants, 79 were non-native and 30 were determined to be native. No sensitive vascular plants were detected. No plants recorded on the CNDDDB query were detected during survey efforts.

The purpose of the assessment was to collect information on the biological resources present within the project area and to determine any biological constraints to site construction. The BRA provided information on the potential for sensitive vegetation communities and special-status plants and wildlife species, including species listed as endangered or threatened under the California or federal Endangered Species Act (CESA and ESA), to occur onsite. Additional information was obtained from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Rare Plant Ranking System. This information was also verified with CAL FIRE staff onsite.

## **ENVIRONMENTAL SETTING**

### **VEGETATION COMMUNITIES**

The western half of the site is more developed and contains several structures and a paved driveway-parking lot. The vegetation in this area is largely non-native, with some naturally occurring Shreve and coast live oaks (*Quercus parvula* var. *shrevei*, *Q. agrifolia* var. *agriflora*). Shrubs and trees are planted near the entrance area and around the buildings. The open vegetated areas contain California non-native grassland species, including the grasses slender wild-oat (*Avena barbata*), small quaking grass (*Briza minor*), ripgut brome (*Bromus diandrus*), Chilean brome (*B. catharticus* var. *elatus*), six-weeks fescue (*Festuca bromoides*) and rattail fescue (*F. myuros*), hare barley (*Hordeum murinum* subsp. *Leporinum*), forbs including long-beaked filaree (*Erodium botrys*), and common cranesbill (*Geranium dissectum*). Ruderal species such as prickly sow thistle (*Sonchus asper* subsp. *a.*) and common sow thistle (*S. oleraceus*), weedy cudweed (*Pseudognaphalium luteo-album*), California burclover (*Medicago polymorpha*), little hop clover (*Trifolium dubium*) and rose clover (*T. hirtum*) are common along the pavement edges. Italian thistle (*Carduus pycnocephalus* subsp. *p.*), an invasive species, also occurs throughout the disturbed area. The shaded areas under native and non-native trees support several native shrubs and herbs, including California blackberry (*Rubus ursinus*), poison-oak (*Toxicodendron diversilobum*), and miner's-lettuce (*Claytonia perfoliata* subsp. *p.*), along with non-native herbs including chickweed (*Stellaria media*), tall sock destroyer (*Torilis arvensis*), and ripgut brome.

The eastern half of the site is composed of woodland and forest dominated by Shreve oak. The Shreve oak favors forest edges and is common in the local area. Other trees present include native Douglas-fir (*Pseudotsuga menziesii* var. *m.*), coast-live-oak, and non-native Monterey pine (*Pinus radiata*). The shaded northern portion of the eastern side of the parcel contains two dense patches of native foothill sedge (*Carex tumulicola*) in the herb layer, along with several individuals of foothill needlegrass (*Stipa lepida*). Understory in the steep shaded area varies and includes Shreve oak seedlings, California blackberry, poison oak and invasive non-native periwinkle (*Vinca major*). Native perennial herbs (very few), include Santa Cruz Mountains iris (*Iris fernaldii*), yerba buena (*Clinopodium douglasii*), Pacific sanicle (*Sanicula crassicaulis*), rigid hedge nettle (*Stachys rigida* var. *quercetorum*), soap root (*Chlorogalum pomeridianum* var. *p.*), Pacific hound's-tongue (*Cynoglossum grande*), and a few individuals of French broom (*Genista monspessulana*).

### **POTENTIAL WATERS OF THE U.S.**

No potential Waters of the U.S. were found within the project area, and there are no wetland features onsite identified on wetland maps. The West Branch of Soquel Creek is approximately 800 feet to the west and main branch of Soquel Creek is approximately 660 feet to the southeast.

### **WILDLIFE**

Wildlife in the vicinity that have been seen onsite include skunks, raccoons, mice, turkeys, deer, bobcat, squirrels, coyote, and gophers. Several different types of bird species that are known to use the site include woodpeckers, hummingbirds, finches, sparrows, blue jays, crows and red-tailed hawks. Although wildlife has been known to use the site, there are no known wildlife corridors that lie within the project site.

## SPECIAL-STATUS WILDLIFE

No special-status animals have been observed by CAL FIRE Forester II, Angela Bernheisel (Soquel Demonstration State Forest Manager). However, a number of special status animals have been documented within five miles of the project site. The special-status animals previously documented are provided in **Table 2**.

**Table 2. Special-Status Wildlife Species Previously Documented within 5 Miles of the Project Site**

<b>Species Common Name</b>	<b>Species Scientific Name</b>
California red-legged frog	<i>Rana aurora draytonii</i>
Foothill yellow-legged frog	<i>Rana boylei</i>
Coho salmon	<i>Oncorhynchus kisutch</i>
Eulachon	<i>Thaleichthys pacificus</i>
Southern steelhead trout	<i>Oncorhynchus mykiss irideus</i>
Tidewater goby	<i>Eucyclogobius newberryi</i>
Mimic tryonia	<i>Tryonia imitator</i>
Monarch butterfly	<i>Danaus plexippus</i>
Mount Herman June beetle	<i>Polyphylla barbata</i>
Ohlone tiger beetle	<i>Cicindela ohlone</i>
Opler's longhorn moth	<i>Adela oplerella</i>
Zayante band-winged grasshopper	<i>Trimerotropis infantilis</i>
Pallid bat	<i>Antrozous pallidus</i>
Santa Cruz kangaroo rat	<i>Dipodomys venustus venustus</i>
Townsend big-eared bat	<i>Corynorhinus townsendii</i>
Western pond turtle	<i>Emys marmorata</i>

### **Amphibians**

#### **California red-legged frog (*Rana aurora draytonii*)**

The California red-legged frog (CRLF) is listed as a federally threatened species by the US Fish and Wildlife Service and a species of special concern by the Department of Fish & Wildlife (CDFW). CRLF is found inhabiting perennial streams and ponds of the Santa Cruz Mountains, and can be expected to occur in or near water year-round. However, at any time of the year they can be found at localities remote from breeding sites in association with streams and springs or any structure on the landscape that offers cool, moist resting or sheltering habitats. They may leave the water when conditions at aquatic sites become adverse. In addition, they may make movements to and from breeding sites. These breeding associated movements typically occur during periods of mild, wet weather, particularly in the fall and spring. These movements may occur in or along stream channels or across upland habitat types and involve a diverse array of riparian and upland habitats.

Nearby CRLF habitat is present within both Soquel Creek and Hester Creek and associated perennial streams throughout the 5-mile assessment area. The 5-mile assessment area contains multiple ponds, however, the closest pond is the old Mill Pond located along Olive Springs Road, approximately 4,000 feet to the northeast of the project area.

The environment within the project area contains features typical of a developed parcel in the area and consists of an annual grass component, and steep oak woodland on the east side of the parcel, with asphalt and building footprints comprising the remainder of the parcel. No ponds or other aquatic features that might be considered suitable habitat are located onsite or upslope of the project area.

### ***Foothill yellow-legged frog (*Rana boylei*)***

The foothill yellow-legged frog is a CDFW species of special concern and is present in low gradient cobble and gravel streams in open sunlight. This species inhabits rocky streams and is highly aquatic, seldom venturing more than a few meters from the stream channel. Low-gradient stream reaches are preferred for breeding. Aquatic habitat suitable for occupation by this species is found in the near-by Soquel Creek and Hester Creek and associated perennial tributaries.

The project area does not contain any suitable habitat for the foothill yellow-legged frog. The main channel of Hester Creek is approximately 540 feet away at its closest point.

## **Fish**

### ***Coho Salmon (*Oncorhynchus kisutch*)***

The coho salmon is a state and federally listed as endangered in the southern end of its range. The Soquel Creek Watershed Enhancement Plan (November 2003) indicated that coho salmon were absent in Soquel Creek due to declines in quality and quantity of the instream habitat from increases in temperature, turbidity, sedimentation, periods of insufficient baseflow and lack of adequate riparian vegetation. However, the CNDDDB indicated that they were observed in Soquel Creek in 2008 in the vicinity of Hinckley Creek. Drainage from the project area is within the Soquel Creek watershed and the creek channel is approximately 660 feet from the project area. Habitat for this species is not present on the proposed project site.

### ***Eulachon (*Thaleichthys pacificus*)***

Eulachon, more commonly referred to as smelt or candlefish, are listed as federally threatened and are a CDFW species of special concern. This species of anadromous fish inhabit coastal waterways and the Pacific Ocean primarily from the Sacramento River to the Bearing Sea in Alaska. The Sacramento River is regarded as the extreme southern range of the species. One CNDDDB occurrence has been recorded approximately 5 miles so the south of the project area in the mouth of Soquel Lagoon. No habitat exists within the project area.

### ***Southern Steelhead Trout (*Oncorhynchus mykiss irideus*)***

These fish are federally listed as threatened (South-Central California ESU). The CNDDDB indicates that Soquel Creek is habitat for the steelhead trout. Steelhead exists within both Hester and Soquel Creek.

### ***Tidewater goby (*Eucyclogobius newberryi*)***

This species is federally endangered and has no state listing status. The tidewater goby utilizes the lagoon created by the impounded mouths of Soquel Creek and Aptos Creek. Associated primarily with lagoon habitat, this fish does not move far upstream, and CNDDDB has two recorded observations within the 5 mile biological assessment area, approximately 4.5 miles away from the project area at the mouths of both Soquel and Aptos Creeks. No habitat exists within or adjacent to the project area.

## **Invertebrates**

### ***Mimic tryonia (Tryonia imitator)***

This species of snail has no federal or state listing. This species lives in brackish water ecosystems occurring close to the ocean environments. One CNDDDB occurrence has been recorded centered outside of the five mile biological assessment area in Capitola. No habitat for this species exists within the project area.

### ***Monarch butterfly (Danaus plexipuss)***

This species has no federal or state listing status. This generally widespread species is migratory in nature and travels along the west coast and can travel as far south as Mexico and Central America. The central coast is a known migratory stop although populations are often centered around the coastal areas within Capitola and Santa Cruz. Habitat or foraging opportunities may exist within the project area, however, SDSF staff who currently work on the proposed project site have not witnessed any monarch butterfly activity within the last year at the Soquel Fire Station-SDSF office site. It is unlikely that a significant population of monarch exists on or within the vicinity of the proposed project site. Additionally, the eastern portion of the site will be retained and will not be disturbed.

### ***Mount Herman June beetle (Polyphylla barbata)***

This species is listed as federally endangered and has no state listing. This species of beetle is associated with sand habitats present in the Scotts Valley and Zayante area. Two CNDDDB occurrences have been recorded approximately 4.6 miles west outside the one-mile biological assessment area in the Scotts Valley area. No suitable habitat exists within the project area.

### ***Ohlone tiger beetle (Cicindela ohlone)***

This species is listed as federally endangered and has no state listing status. The Ohlone tiger beetle is endemic to the coastal prairies situated on coastal terraces within Santa Cruz County. CNDDDB has two reported occurrences within the five-mile biological assessment area. One occurrence is approximately 3.9 miles to the southwest in the Capitola area and one approximately 3.7 mile to the west in the Scotts Valley area. No habitat exists within the project area.

### ***Opler's longhorn moth (Adela oplerella)***

This species has no state or federal listing. One CNDDDB occurrence has been recorded approximately 3.7 miles to the northwest of the project area in the Scotts Valley area.

### ***Zayante band-winged grasshopper (Trimerotropis infantilis)***

This insect is listed as federally endangered and has no state listing status. *Trimerotropis infantilis* inhabits inland sand habitats, which include maritime coast range ponderosa pine forests around the Zayante and Scotts Valley area. One CNDDDB occurrence has been recorded outside of the 5-mile biological assessment area. The project area does not contain suitable habitat for this species.

## **Mammals**

### ***Pallid bat (Antrozous pallidous)***

The pallid bat is a state species of special concern. This bat commonly occurs at a wide variety of low elevation habitats including grasslands, woodlands, mixed conifer forests, and shrublands. They prefer dry, open places, with rocky areas to provide roosting locations. The pallid bat roosts in caves, hollowed trees, structures, or mine shafts. Habitat does not exist within the project area, however, it may exist within the five-mile biological assessment area in the form of old structures, hollow trees, bark fissures or other small cavities suitable for bats, either natural or manmade.

Two CNDDDB occurrences of the pallid bat have been noted. One occurrence is approximately 7,000 feet to the northeast and one on the southwest edge of the five-mile biological assessment area. Although the project area contains foraging habitat for bats, no roosting habitat has been observed onsite. No cliffs or rock outcroppings, mine shafts or derelict buildings exist within the project site. SDSF staff has examined the larger oak trees proposed for removal under the proposed project and did not find any large cavities.

### ***Santa Cruz kangaroo rat (Dipodomys venustus venustus)***

This species has no federal or state listing. The Santa Cruz kangaroo rat is primarily associated with sand hills habitat in the Scotts Valley and Zayante areas. One CNDDDB occurrence has been recorded within the five-mile biological assessment area approximately two miles to the northeast on the ridgeline between Hinckley Creek and Soquel Creek. Domestic cats are also prevalent in this developed area, leading to the likelihood of predation. Upland sandhills habitat does not exist within the project site and due to presence of hardened surfaces and maintained non-native lawn surrounding the existing infrastructure.

### ***Townsend big-eared bat (Corynorhinus townsendii)***

This species is currently a candidate species for state listing and has no federal listing status. One CNDDDB occurrence of the Townsend big-eared bat has been noted close to Capitola, approximately 5.4 miles to the southwest of the project area.

This species of bat is known to utilize cave environments as well as old buildings and potentially large cavities in trees for roosting and maternity roosts. Habitat does not exist within the project area, however, it may exist within the five-mile biological assessment area in the form of old structures, hollow trees, or other cavities suitable for bats, either natural or manmade. CAL FIRE staff has examined the trees that are identified for removal and there were no potential roosting habitat was observed.

## **Reptiles**

### ***Western pond turtle (Emys marmorata)***

This turtle is listed as a CDFW species of special concern. The turtle's habitat is thoroughly aquatic, found in ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. In streams they avoid fast-moving and shallow water, and tend to be concentrated in pools and backwater areas. Western pond turtles need basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg laying. Pond turtles are uncommon in heavily shaded areas. Nests may be excavated more than a quarter mile from water and are generally located in exposed (unshaded) upland locations. The nesting season extends from April through August.

Soquel Creek, Hester Creek and the old Mill Pond are within the BAA and provide habitat for this species. The turtle has been recorded on the CNDDDB at the old Mill Pond, approximately 4,000 feet to the northeast of the project area, and on the outer edge of the five mile assessment area approximately five miles to the northeast.

The environment on the project site contains features typical of a developed parcel and consists of an annual grass component, steep oak woodland on the east portion, and asphalt and structures on the remainder of the parcel. The proposed project site does not contain suitable habitat that would support this species.

### **SPECIAL-STATUS PLANTS**

The following special-status plants were identified in the CNDDDB as occurring within five miles of the project site. As indicated, a botanical survey was conducted onsite and none of the species identified in the CNDDDB were found on the project site.

**Table 3. Special-Status Plant Species Previously Documented within 5 Miles of the Project Site**

Species Common Name	Species Scientific Name
Anderson's manzanita	<i>Arctostaphylos andersonii</i>
Arcuate bush-mallow	<i>Malacothamnus arcuatus</i>
Ben Lomond buckwheat	<i>Eriogonum nudum var. decurrens</i>
Ben Lomond spineflower	<i>Chorizanthe pungens var. hartwegiana</i>
Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>
Bonny Doon manzanita	<i>Arctostaphylos silvicola</i>
Bristly sedge	<i>Carex comosa</i>
Choris' popcorn-flower	<i>Plagiobothrys chorisianus var. chorisianus</i>
Deceiving sedge	<i>Carex comosa</i>
Dudley's lousewort	<i>Pedicularis dudleyi</i>
Marsh sandwort	<i>Arenaria paludicola</i>
Minute pocket moss	<i>Fissidens pauperculus</i>
Robust spineflower	<i>Chorizanthe robusta var. robusta</i>
San Francisco popcorn-flower	<i>Plagiobothrys diffuses</i>
Santa Cruz clover	<i>Trifolium buckwestiorum</i>
Santa Cruz Mountains beardtongue	<i>Penstemon rattanii var. kleei</i>
Santa Cruz tarplant	<i>Holocarpha macradenia</i>
Santa Cruz wallflower	<i>Erysimum teretifolium</i>
Scotts Valley polygonum	<i>Polygonum hickmanii</i>
Scotts Valley spineflower	<i>Chorizanthe robusta var. hartwegii</i>
Swamp harebell	<i>Campanula californica</i>
White-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>
Woodland woolythreads	<i>Monolopia gracilens</i>

#### ***Anderson's manzanita (Arctostaphylos andersonii)***

This species has no federal or state listing (CNPS 1B.2). *A. andersonii* is a perennial evergreen shrub which occupies openings and edges in broadland upland forest, chaparral and north coast coniferous forests. Two CNDDDB occurrences occur within the 5-mile biological assessment area; both are situated approximately 3 miles to the south east. The botanical survey did not find this species onsite.

***Arcuate bush-mallow (Malacothamnus arcuatus)***

This plant has no federal or state listing (CNPS 1B.2). *Malacothamnus arcuatus* It prefers chaparral habitats from 260 – 1,100 feet in elevation. This habitat type is not found within the project area. There is one occurrence found in the CNDDDB, located approximately 4.7 miles northeast and approximately. No specimens were observed on the project site during the botanical survey.

***Ben Lomond buckwheat (Eriogonum nudum var. decurrens)***

No federal or state listing (CNPS 1B.1). Generally occurs on sandy soils in chaparral, cismontane woodland, and lower montane coniferous forest. Micro-habitat is ponderosa pine sand hills in Santa Cruz County. One CNDDDB occurrence occurs approximately 4.9 miles to the north west of the project area. Occurrences are noted in open sand hills, sand parkland with ponderosa pine, sand cliffs and small deposits. No suitable habitat exists within the project site.

***Ben Lomond spineflower (Chorizanthe pungens var. hartwegiana)***

Federally listed as endangered with no state listing (CNPS 1B.1). General habitat types include lower montane coniferous forest and maritime ponderosa pine sand hills. It is endemic to the Ben Lomond sands of Santa Cruz County and more specifically the Scotts Valley area. Micro-habitat is Zayante coarse sands in maritime ponderosa pine sand hills. Eight CNDDDB occurrences are recorded within the biological assessment area. The closest occurrence is approximately 3.3 miles to the northwest of the project area. No suitable habitat exists within the project site, and no specimens were observed during the botanical survey.

***Bent-flowered fiddleneck (Amsinckia lunaris)***

This species has no state or federal listing (CNPS 1B.2). This yellow-flowering annual herb occupies coastal bluff scrub, cismontane woodland, and valley and foothill grasslands. Some closed canopy oak woodland habitat exists within the project area. One CNDDDB occurrence is recorded approximately 3.2 miles to the northwest of the project area. The botanical survey did not identify this species within the project site.

***Bonny Doon manzanita (Arctostaphylos silvicola)***

Also known as silver leafed manzanita, this plant has no state or federal listing (CNPS 1B.2). Habitat is located in chaparral, closed cone coniferous forest, and lower montane coniferous forests. This species occurs primarily in Zayante (inland marine) sand formation habitats in Santa Cruz County. Four CNDDDB occurrences are recorded within the five-mile biological assessment area. All occur in the same general area, with the closest occurrence being approximately 4.1 miles to the northeast. No suitable habitat exists within the project area. This species was not observed during the botanical survey.

***Bristly sedge (Carex comosa)***

This species has no federal or state listing (CNPS 2.1). It can be found in swamps and marshes from sea level to 1400 feet. There a recorded population in the CNDDDB located approximately 3.2 miles east of the project area in Whites Lagoon within the Forest of Nisene Marks State Park. No suitable habitat exists within the project site. This species was not observed during the botanical survey.

***Choris' popcorn-flower (Plagiobothrys chorisianus var. chorisianus)***

No federal or state listing (CNPS 1B.2). This species prefers chaparral and coastal prairie in mesic sites. Two occurrences were listed by CNDDDB approximately 3.8 miles to the west and northwest of the project area in the Scotts Valley area. No suitable habitat exists within the project site.

***Deceiving sedge (Carex saliniformis)***

This species has no state or federal listing (CNPS 1B.2). This species is a perennial rhizomatous herb, occupying mesic sites in coastal prairie, coastal scrub, meadows and seeps, and coastal salt marshes and swamps. One occurrence has been recorded in CNDDDB approximately 5 miles to the west of the project area in the Scotts Valley area. No suitable habitat exists within the project site.

***Dudley's lousewort (Pedicularis dudleyi)***

This plant is listed by the state as rare, with no federal listing (CNPS 1B.2). Described habitat is coniferous forest, maritime chaparral, cismontane woodland, and valley and foothill grassland. Known from fewer than 10 occurrences, the scarcity of the plant and distance from its known location make its presence very unlikely. The plant flowers in April-June. The area located further northeast of the project site (SDSF) is comprised of north coast coniferous forest. Within this habitat type, Dudley's lousewort is known as a widely scattered species with most records from moist flats in redwood forests, or road cuts where Douglas-fir is present. One CNDDDB occurrence is recorded approximately five miles to the southeast of the project area. No suitable habitat exists within the project area. No specimens were observed on the project site during the botanical survey.

***Marsh sandwort (Arenaria paludicola)***

This moss is federally and state listed as endangered (CNPS 1B.1). It is a swamp and bog or stagnant water dwelling plant. One CNDDDB occurrence has been recorded over 5 miles to the west of the project area. No suitable habitat exists within the project area. The botanical survey conducted on the project site did not identify any specimens of this species.

***Minute pocket moss (Fissidens pauperculus)***

This moss has no state or federal listing (CNPS 1B.2). The plant is found in north coast coniferous forests, growing on damp soils in dry streambeds, and on stream banks. There is one CNDDDB record over 2.3 miles southeast along Aptos Creek in the Forest of Nisene Marks State Park. No suitable habitat exists within the project site.

***Robust spineflower (Chorizanthe robusta var. robusta)***

This plant is federally listed as endangered, with no state listing status (CNPS 1B.1). General habitat association is cismontane woodland, coastal dune and coastal scrub, on sandy terraces and bluffs or in loose sand. Two CNDDDB occurrences have been recorded approximately 3.4 miles to the southwest of the project area. No suitable habitat exists within the project site.

***San Francisco popcorn-flower (Plagiobothrys diffuses)***

Listed state endangered and as CNPS 1B.1, this species is endemic to San Mateo County. It prefers chaparral, valley and foothill grasslands, and coastal scrub. Populations are only known within very uncommon serpentine vertisol clays, in relatively open areas from 164-650 feet in elevation. Two CNDDDB occurrences have been recorded within the 5-mile biological assessment

area. One occurrence is approximately 3.1 miles to the south and the other 3.5 miles to the west of the project area in the Scotts Valley Area. No suitable habitat exists within the project site.

***Santa Cruz clover (Trifolium buckwestiorum)***

This plant has no federal or state listing (CNPS 1B.1). It is known from 10 very small occurrences in broadleaf upland forest, cismontane woodland, and coastal prairie margins. It blooms from April to October. Two CNDDDB occurrences have been recorded within the 5-mile biological assessment area. One occurrence is approximately 3.7 miles to the southwest and the other occurrence is approximately 4.7 miles to the east of the project area. The botanical survey did not identify any specimens on the project site.

***Santa Cruz Mountains beardtongue (Penstemon rattanii var. kleei)***

This plant has no federal or state listing (CNPS 1B.2). Habitat includes recently burned chaparral, openings in lower montane and north coast coniferous forest, or along roadcuts. Penstemons are striking, perennial flowers that bloom from May-June. The closest known population is over 4.2 miles north east in the Forest of Nisene Marks State Park. Suitable habitat is not located on the project site.

***Santa Cruz tarplant (Holocarpha macradenia)***

This plant is listed as state endangered and federally threatened (CNPS 1B.1). Santa Cruz tarplant is an annual herb that occupies sandy, sandy soils on coastal prairie and scrub. It can also be found on valley and foothill grassland. CNDDDB has four recorded occurrences within the 5-mile biological assessment area. The closest specimen was discovered over four miles south of the project area. No habitat exists within the project site.

***Santa Cruz wallflower (Erysimum teretifolium)***

This plant is listed as state and federally endangered (CNPS 1B.1). Santa Cruz wallflower is a perennial herb that inhabits inland marine sands, chaparral, and lower montane coniferous forests. General habitat does exist within the Project area but closest known specimen is recorded over four miles away from the plan boundary, clustered around the City of Scotts Valley. The botanical survey did not find any specimens on the Project site.

***Scotts Valley polygonum (Polygonum hickmanii)***

This species is listed as state and federally endangered (CNPS 1B.1). This annual herb is known from only two observations in Scotts Valley, and habitat consists of valley and foothill grassland. Two recorded CNDDDB occurrences exist within the 5-mile biological assessment area. This species was not observed during the botanical survey.

***Scotts Valley spineflower (Chorizanthe robusta var. hartwegii)***

Federally listed as endangered, with no state listing (CNPS 1B.1). This flowering annual herb occupies sandy meadows and seeps, and valley and foothill grasslands on mudstone and Purisima outcrops. Only known occurrences within 5 miles of the project area are in Scotts Valley, approximately 3.5 miles to the northwest of the project area. No habitat exists within the project site.

***Swamp harebell (Campanula californica)***

This species has no federal or state listing (CNPS 1B.2). Its habitat includes bogs and ferns, meadows, freshwater marshes, coastal prairie, and closed-cone coniferous forest. It is also found

within north coast coniferous forests. It is found locally only on a bog in Scotts Valley, approximately 5 miles to the west of the project area. No species were observed on the project site.

**White-rayed pentachaeta (*Pentachaeta bellidiflora*)**

This plant is federally and state listed as endangered (CNPS 1B.1). It is an astor, blooming from March to May, occupying dry, open rocky slopes, or grassy or north coastal scrub. Its habitat is described as grasslands and serpentine soils, grassy rock areas. One, observation centered outside of the 5-mile biological assessment area has been recorded in the CNDDDB. Suitable habitat is not present on the project site.

**Woodland woollythreads (*Monolopia gracilens*)**

Plant has no state or federal listing (CNPS 1B.2). Species occupies serpentine soils, and prefers openings in broadleaf upland forest, chaparral, and north coast coniferous forest. The plant can also be found in cismontane woodlands, and valley and foothill grasslands. CNDDDB has two recorded occurrences of this species within the 5-mile biological assessment area within the riparian habitat surrounding Porter Gulch, approximately 3 miles to the south of the project area. The botanical survey did not find any specimens on the project site.

**Discussion**

<p>a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?</p>	<p>Potentially Significant Impact</p>	<p>Less Than Significant with Mitigation Incorporated</p>	<p>Less Than Significant Impact</p>	<p>No Impact</p>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project will remove 26 trees, consisting of 13 oaks, one fir, five redwoods, two pines, and five cedars. All of the trees, with the exception of two are within the western portion of the site that is currently developed. The eastern portion of the site, containing the woodland/forest, will remain relatively untouched except for two trees, an oak and fir slated for removal due to construction of a water tank.

Tree removal could have an impact on birds that use the trees during nesting season (February 1 through August 31). All native birds, including raptors, are protected under the California Fish and Wildlife Code and the Federal Migratory Bird Treaty Act (MBTA). The following mitigation measure will be implemented to avoid a significant impact to native birds that may use the trees to nest. **Mitigation BIO-1** below shall be implemented to ensure impacts are less than significant.

The proposed project site is located approximately 660 feet southeast from Soquel Creek, although the water drains to the west off the project site. The West Branch of Soquel Creek is approximately 800 feet to the west from the proposed project site. The water quality of all natural waterways is important to maintain for public health and safety and the health of the ecosystem. Occurrences identified in the CNDDDB near the project area and further

downstream include California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boylei*), coho salmon (*Oncorhynchus kisutch*), eulachon (*Thaleichthys pacificus*), southern steelhead trout (*Oncorhynchus mykiss irideus*), and tidewater groby (*Eucyclogobius newberryi*).

The proposed project is subject to the Construction Storm Water Program pursuant to California State Water Resources Control Board. Potential water quality impacts are present during demolition and grading and post project due to the increase in non-permeable surfaces and pollutants. Demolition activities would create debris and pollutants that could affect water quality and construction activities will disturb soils that can cause sedimentation during storm events. Steelhead trout and salmon are especially sensitive to sedimentation. Additionally, the increase in impervious surfaces from the completed project could create additional runoff that could impact the watershed.

CAL FIRE will need to obtain a Construction General Permit from the Central Valley Regional Water Quality Control Board (National Pollutant Discharge Elimination System) as part of the Project. With implementation of best management practices and permit requirements to minimize contact with potential stormwater pollutants and decrease erosion, potential significant impacts to special status aquatic species would be reduced to a less than significant level (see **Section IX Hydrology and Water Quality**).

#### **BIO-1 Pre-Construction Nesting Survey**

1. Conduct a pre-construction nesting bird survey of all suitable habitat on the project site within 7 days prior to the commencement of construction during the nesting season (February 1 through August 31). Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through January 31).
2. If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist (or forester) in accordance with CDFW recommendations for buffer distances relative to the species identified. Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to detect any behavior changes as a result of construction of the proposed project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist (or forester). No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nesting tree. Once the young are independent of the nest, no further measures are necessary and construction may commence.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located within a riparian area or other sensitive natural community. Chapter 5 of Santa Cruz County’s General Plan indicates the definition of sensitive habitat in the county as meeting one or more of the following criteria:

1. Areas of special biological significance as identified by the State Water Resources Control Board.
2. Areas which provide habitat for locally unique biotic species and communities, including coastal scrub, maritime chaparral, native rhododendrons and associated elkgrass, mapped grasslands in the coastal and sand parkland; and special forests including San Andreas live oak woodlands, valley oak, Santa Cruz cypress, indigenous ponderosa pine, indigenous Monterey pine and ancient forests.
3. Areas adjacent to essential habitats of rare, endangered or threatened species as defined in 5 and 6 below.
4. Areas which provide habitat for species of special concern as listed by the California Department of Fish and Wildlife in the Special Animals List, Natural Diversity Database.
5. Areas that provide habitat for rare or endangered species which meet the definition of Section 15380 of the California Environmental Quality Act guidelines.
6. Areas that provide habitat for rare, endangered or threatened species as designated by the State Fish and Game Commission, United States Fish and Wildlife Service or California Native Plant Society.
7. Nearshore reefs, rocky intertidal areas, sea caves, islets, offshore rocks, kelp beds, marine mammal hauling grounds, sand beaches, shorebird roosting, resting and nesting areas, cliff nesting areas and marine wildlife or educational and research reserves.
8. Dune plant habitats.
9. All lakes, wetlands, estuaries, lagoons, streams, and rivers.
10. Riparian corridors.

The Project site does not support any of these habitats. No impact would occur.

c) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in the environmental setting section, no potential Waters of the U.S. were found on the project site. No impact would occur.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

There are no wildlife corridors on or near the project site. The closest known wildlife corridor is the area located along Highway 17 and Laurel Road (Laurel Curve) approximately five miles northwest. This mountain corridor connects the Loch Lomond watershed to the Forest of Nisene Marks State Park and at a larger scale connects the Santa Cruz Mountains to the Diablo Range and central coast. Wildlife species that have been seen in the area include mountain lions, deer, raccoons, bobcats, fox, badgers, elk and coyotes.

Although not a wildlife corridor, deer have been observed on the property. The proposed project will not develop the eastern portion of the site and the woodland will remain intact providing an area for foraging and movement of wildlife. Additionally, all native birds, including raptors are protected under the MTBA and the California Fish and Game Code.

Implementation of **Mitigation Measure BIO-1**, a pre-construction nesting survey, will avoid any potentially significant impacts for birds using the project site as nesting habitat. Impacts would be less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Santa Cruz County has a Significant Trees Protection Ordinance (Title 16, Chapter 16.34) that protects trees within the county's Coastal Zone and within the rural or urban services line. In addition, trees are protected outside of urban or rural service boundaries where visible from a scenic road, any beach, or within a designated scenic resource area and where any tree is located in a sensitive habitat (identified in item b above).

The proposed project will remove 26 trees from the western portion of the property that consists of 13 oaks, one fir, five redwoods, two pines, and five cedars. No trees will be removed from the eastern portion of the site that contains the oak woodland. Tree removal is necessary as the project site is narrow and the new upgraded facilities will be larger in nature due to current code requirements and larger fire trucks.

The project site is not located in a rural or urban service line, is not visible from a scenic road, or beach, and is not within a designated scenic resource area or located in a sensitive habitat. Therefore, proposed project is not subject to the Significant Trees Protection Ordinance. The proposed project would not conflict with Santa Cruz ordinances or policies. However, since tree removal will occur and Santa Cruz County does have policies to generally protect biological resources the impact would be less than significant.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Santa Cruz County has been working on a Regional Habitat Conservation Plan for the Santa Cruz Sandhills. The habitat occurs near the towns of Bonny Doon, Boulder Creek, Ben Lomond, Felton and Scotts Valley. An Interim programmatic habitat conservation plan was approved for this area by U.S. Fish and Wildlife Service in November, 2011.

The Land Trust of Santa Cruz County protects lands throughout Santa Cruz County. In 2011 the Land Trust completed the Conservation Blueprint: Assessment and Recommendations for Santa Cruz County that recommends the protection of 50,000 priority acres, which includes agricultural lands, timberland and high value biological lands. The Conservation Blueprint identifies seven important areas that would provide multi-benefit conservation. The project site is not within any of these designated areas.

The project site is not located within an area subject to any adopted habitat conservation plan, natural community conservation plan or other local, regional, or state habitat conservation plan. No impact would occur.

## **Cultural Resources**

### **Environmental Setting**

From 1992-2000, CAL FIRE initiated inventories for cultural resources upon many of the land parcels which are either owned and managed by the Department or owned by other entities, but leased to CAL FIRE for the operation of a state facility. This inventory work is on-going throughout CAL FIRE's properties and facilities. The survey work is intended to identify archaeological and historical sites, historic buildings, structures, objects, traditional cultural properties, and other types of cultural resources so that they can be managed. This program was initiated in response to California Executive Order W-26-92, issued in 1992, which directed state agencies to complete such inventories and prepare plans for appropriate management and preservation of significant cultural resources located on state properties. In 2001 the Department completed the **Management Plan for CDF's Historic Buildings and Archaeological Sites** supported by an environmental impact report (Foster and Thornton 2001, Foster and Sosa 2001).

As part of this work, two comprehensive statewide inventories for historic buildings and structures were completed by CAL FIRE's consulting historian Mark V. Thornton. The first of these was an inventory and assessment of all 77 of CAL FIRE's fire lookout stations (Thornton 1993) followed by an inventory and assessment of all forest fire station compounds, conservation camps, and administrative sites containing buildings or structures which were constructed prior to 1946 (Thornton 1994). A total of 189 pre-1946 buildings and structures were identified at 73 CAL FIRE facilities. Thornton did not evaluate the structures located at the Soquel FFS because at the time

his report was prepared the structures were less than 45 years old. However, he did include information indicating the existing station buildings were constructed between 1953 and 1955 (Thornton 1994:916).

In June, 2010, the entire project area was subjected to intensive cultural resource investigations by professional archaeologists (Dr. L.K. Napton and E.A. Greathouse) working for CAL FIRE through an archaeological services contract with the California State University Stanislaus. These studies were conducted in accordance with **Archaeological Review Procedures for CAL FIRE Projects** (Foster and Pollack 2010). The work included a current archaeological records check at the California Historical Resource Information System (CHRIS) Northwest Information Center (NWIC), other pre-field research, consultation with the Native American Heritage Commission (NAHC) and local Native American tribal groups listed on CAL FIRE’s Native American Contact List for Santa Cruz County, and an intensive on-ground field survey conducted on June 3, 2010. An overview of the cultural setting for this project area was also prepared by the archaeologist from Stanislaus State.

The cultural resource investigations by Napton and Greathouse produced the following results and work products:

- Other than the statewide historic building inventory and management plan work discussed above, there are no previous cultural resource studies on record at the NWIC from within the project area. Four studies were completed within a quarter-mile of the project area.
- No prehistoric archaeological sites, features, or artifacts were identified in the area of potential effect (APE) of the project either from the records search made by the NWIC or through the on-ground survey made by Napton and Greathouse.
- The fire station compound, built between 1953 and 1955 (and now 60-62 years old) constituted a single historical resource. The three original buildings are of sufficient age to require assessment pursuant to the criteria of the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). A detailed 15-page site record for the compound was included in the final report.

**Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The individual buildings and associated features at the fire station were evaluated for eligibility for listing on the NRHP and/or the CRHR. Napton and Greathouse concluded (with concurrence by the Department’s Historic Preservation Officer) that:

The Soquel FFS buildings and facilities do not meet any of the conditions specified in the eligibility criteria. Recordation and documentation have fulfilled the research potential of the existing buildings and appurtenant facilities. Investigation of the Soquel FFS facilities did not yield information important to prehistory, nor is further effort likely to do so (Napton and Greathouse 2010:15).

The documentation has been completed for these structures and no other measures are required as the structures on site were found to be ineligible for listing for either the California or National register. Impacts to historical resources are less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No archaeological resources were discovered at the Soquel FFS during inventories by CAL FIRE's contract archaeologist. However, there is always a potential for unknown archaeological resources to be unearthed during excavations for the project. With implementation of the following mitigation measures, impacts to unknown resources would be less than significant.

**Mitigation Measure CUL-1 Ground Disturbance Monitoring**

CAL FIRE shall ensure that ground disturbance is monitored during subsurface excavations, demolition and removal of the buildings, and grading of the project site. This work will be performed by a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist. This work shall be done by a CAL FIRE or other professional archaeologist working in close consultation with a CAL FIRE archaeologist. The CAL FIRE staff archaeologist shall determine the timing and duration of the required monitoring.

Should subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt and the professional archaeologist shall evaluate the significance of the find. If the archaeologist determines that the resource is significant, an evaluation and development of appropriate recommendations for conservation and management shall be prepared in consultation with appropriate experts.

**Mitigation Measure CUL-2 Accidental Discovery**

In the event that evidence of human remains is discovered, construction activities shall be halted and a CAL FIRE archaeologist, the Santa Cruz County Coroner and the Native American Heritage Commission are to be notified of the discovery. If the coroner determines that the remains are Native American, the coroner must contact the California NAHC. CEQA Guidelines, Public Resources Code Section 5097.94 and Section 7050.5 of the Health and

Safety Code specify procedures to be followed in the event of discovery of human remains on non-federal land. Upon request, the NAHC will provide a list of most likely descendants, who will specify treatment and disposition of any Native American remains found within the area of APE for the project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Santa Cruz Geographic Information System website was queried to ascertain whether there was a potential for paleontological resources to occur onsite. The closest known area that could contain these resources occurs approximately four miles west of the project site near Scott's Valley. No known paleontological resources were determined to be present on the project site, and field surveys found no evidence of presence. However, with implementation of **Mitigation Measure CUL-1**, any impacts to unknown paleontological resources would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The cultural resource investigations did not indicate the presence of human remains or associated grave goods within the project area. Nonetheless, because the project's location is near a year-round stream there is a possibility for unknown human remains to be discovered. In the event that human remains are discovered the requirements of Mitigation Measure C-2 would be implemented. With incorporation of **Mitigation Measure CUL-2** will ensure that potential impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource pursuant to Public Resources Code Section 21084.2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Assembly Bill 52 (2014) relating to Native Americans establishes a process for consulting with Native American tribes and groups regarding these resources. Tribal cultural resources are

“sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe....”. A tribal cultural resource must be on, or eligible for, the CRHR for historical resources, or must be included in a local register of historical resources. AB52 indicates that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment (PRC Section 21084.2).

The bill requires a lead agency to begin consultation with a California Native American tribe traditionally and culturally affiliated with the geographic area of the proposed project and to inform the tribe, if requested, of proposed projects prior to determining what type of environmental document is required.

As indicated above, an Archaeological and Historical Investigation of the project site was completed by L. Kyle Napton, Ph.D. and E.A. Greathouse, M.A. (June 2010). As part of the investigation, the Native American Heritage Commission and Santa Cruz Native American Contacts were notified (Coastanoan Ohlone Rumsen-Mutsen Tribe, Indian Canyon Mutsun Band of Costanoan, Trina Marine Ruano Family, and Amah Mutsun Tribal Band). No comments or requests for consultation were received.

The project site has been developed since the early 1950’s and the surrounding area is developed as rural residential. No tribal cultural resources have been identified onsite or surrounding the project site and no request for consultation has been received. The replacement of the proposed project would not impact a tribal cultural resource.

## ***Geology and Soils***

### ***Environmental Setting***

According to the Geologic Hazards Evaluation and Geotechnical Investigation prepared by Geocon Consultants, Inc. (August 2015), the site is located within the coast ranges geomorphic province of northern California, which is characterized by subparallel north to northwest-trending mountain ranges and intermountain alluvial valleys. The site is located approximately five miles inland (north) of the Pacific Ocean (northern Monterey Bay) in the western foothill region of the Santa Cruz Mountains.

The western end of the site has been mapped as older, Pleistocene age floodplain deposits (Qof). The eastern hillside portion of the site is mapped as Purisima formation. On a regional basis, the floodplain deposits generally consist of sand, gravel, and clay. The Pursima formation generally consists of friable, fine-grained sandstone. The western portion of the site is located in a mapped Santa Cruz County liquefaction hazard zone. The site is not located in a county fault rupture hazard zone or landslide hazard zone.

## Discussion

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Earthquake fault?

The site is not located within a currently established Alquist-Priolo Earthquake Fault Zone. Evidence based upon the exploratory borings, review of maps and reports indicate that no active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed project is considered low. A less than significant impact would occur.

### **Strong seismic ground shaking?**

The Geologic Hazards Evaluation and Geotechnical Investigation (August 2015) identified the following known active faults within 62 miles (100 kilometers) of the project site.

**Table 4 Regional Fault Summary**

Fault Name	Approximate Distance to Site (miles)	Maximum Earthquake Magnitude, $M_w$
Zayante- Vergeles	1.0	6.8
San Andreas (Santa Cruz Mtn.)	4.2	7.0
San Andreas (1906)	4.2	7.9
Sargent	5.8	6.8
San Andreas (Peninsula)	9.7	7.1
Monte Vista – Shannon	9.8	6.8
Monterey Bay – Tularcitos	13.4	7.1
San Andreas (Pajaro)	14.9	6.8
San Gregorio	16.4	7.3
Hayward (SE Extension)	19.9	6.4
Calaveras (South of Calaveras Reservoir)	20.1	6.2
Palo Colorado – Sur	20.8	7.0
Rinconada	27.5	7.3
San Andreas (Creeping)	28.3	6.5
Hayward (Total Length)	28.5	7.1
Calaveras (North of Calaveras Reservoir)	28.5	6.8
Hayward (South)	28.5	6.9
Quien Sabe	32.7	6.4
Greenville	35.2	6.9
Ortigalita	39.6	6.9
Great Valley – Segment 8	43.7	6.6
Great Valley – Segment 7	44.0	6.7
Great Valley – Segment 6	46.9	6.7
Great Valley – Segment 9	47.3	6.6
Hayward (North)	48.7	6.9
Concord – Green Valley	58.2	6.9

Source: Geocon Consultants, Inc.

The site has experienced historic earthquakes from various regional faults. The seismicity of the region surrounding the site was formulated based on research of an electronic database of earthquake data (Geocon Consultants, Inc., 2015).

Although it is expected that the project site could experience strong seismic shaking during the anticipated life expectancy of the proposed project, the potential for damage due to ground shaking would be minimized by property design and adherence to seismic design criteria as recommended in applicable building codes. A less than significant impact would occur.

**Seismic-related ground failure, including liquefaction?**

The review of available reports published by the California Geological Survey and the United States Geological Survey indicates that the site has not experienced reported ground failure as a result of past earthquakes.

Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements.

The areas that have the greatest potential for liquefaction are those in which the water table is less than 50 feet below ground surface and the soils are predominantly clean, poorly graded sand deposits of loose to medium-dense relative density. The Geologic Hazards Evaluation and Geotechnical Investigation prepared by Geocon Consultants, Inc. (August 2015) indicated that liquefaction is not a high hazard for the project site. A less than significant impact would occur.

**Landslides?**

A landslide was mapped in the area, approximately 1/3 mile south of the project site on the east side of Soquel San Jose Road. However, the site investigation did not reveal any localized slumping, deep-seated slope failures, debris slides/flows, or conditions indicative of active landslides. Three approximately 3- to 8-foot-high, 1:1 cut slopes in Purisima Formation material associated with historic cut-fill activities at the site exhibit raveling and erosion, but do not show evidence of larger-scale instability.

Stability of the natural slope on the eastern portion of the site was analyzed. The modal calculations indicated that the site is stable and would not result in landslides. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Best management practices (BMPs) are included as part of the Storm Water Pollution Prevention Plan prepared for the proposed project and would be implemented to manage erosion and the loss of topsoil during construction-related activities (see **Hydrology and Water Quality, Section IX**). Soil impacts would be reduced to a less than significant impact.

c) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site has been previously developed. Although the site is subject to ground shaking due to the proximity to major faults within the region, there is a low-to-zero potential for liquefaction, subsidence, or collapse (Geocon Consultants 2015). The proposed project will be constructed in accordance with seismic safety requirements. A less than significant impact would occur.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Soil conditions observed on the project site and the results of plasticity index testing, near-surface site soils are primarily granular and therefore have a low expansion potential. No impact would occur.

e) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A septic tank will be included in the project. The Geologic Hazards Evaluation and Geotechnical Investigation (Geocon Consultants, Inc. 2015) indicated that the project site soils will support the use of a septic tank and leach field. No impacts would occur.

## **Greenhouse Gas Emissions**

### **Environmental Setting**

An air quality study, which includes an analysis of greenhouse gas emissions, was prepared for the proposed Project by KD Anderson & Associates (2015). The main source of greenhouse gas emissions (GHG) associated with the proposed project would be from short-term combustion of

fossil fuels during construction activities. As indicated in the air quality section, the proposed project would not result in a change in long-term operational emissions. The generation of GHG emissions has the potential to affect climate on a global scale. Pursuant to AB 32 the California Global Warming Solutions Act, the California Air Resources Board (CARB) prepared and adopted the Climate Change Scoping Plan. The Climate Change Scoping Plan outlines the state's strategy to achieve the year 2020 GHG emission limits in AB 32. The Climate Change Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California.

Neither the MBUAPCD nor Santa Cruz County has established a quantified threshold for determining the significance of GHG emissions. The nearest air district that has adopted thresholds is the Bay Area Air Quality Management District (BAAQMD). KD Anderson used the BAAQMD's thresholds for two reasons:

- A quantified threshold is needed in response to the direction provided in Section 15064.4(b) of the *State CEQA Guidelines* to calculate GHG emissions, and to assess whether project emissions exceed the threshold.
- While the proposed project is in the MBUAPCD, it is geographically close to the BAAQMD. The project site is approximately five miles from the BAAQMD.

The BAAQMD *Adopted Air Quality CEQA Thresholds of Significance – June 2, 2010* presents significance thresholds for several types of pollutants, and presents thresholds for both construction-related emissions and operational emissions. For GHG emission, a threshold of 1,100 metric tons (MT) of CO<sub>2</sub>e per year is presented.

The BAAQMD GHG threshold is described in the *Adopted Air Quality CEQA Thresholds of Significance* as applying to operational emissions. No thresholds are presented for construction-related emissions. However, KD Anderson & Associates determined that it was appropriate to apply this threshold to provide a quantitative basis for determining the significance of project-related GHG emissions as indicated in the CEQA Guidelines. In addition, neither Section 15064.4(a) nor Section 15064.4(b) make a distinction between the construction-related and operational GHG emissions. Applying an operational significance threshold to construction-related emissions is considered conservatively strict because the operational significance thresholds are intended to apply to annual emission that would repeatedly occur every year for the lifetime of the project. Conversely, the proposed project would only generate construction-related emissions, which would only occur once, during the finite construction period (KD Anderson 2015).

**Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would generate GHG emissions in the study area. Short-term construction-related emissions associated with the project were estimated using the CalEEMod emissions modeling program.

Implementation of the Soquel FFS replacement project would result in the following amounts of construction-related GHG emissions:

- In 2017, construction of the proposed project would result in 67.46 MT of CO<sub>2</sub>e emissions.
- In 2018, construction of the proposed project would result in 12.25 MT of CO<sub>2</sub>e emissions.

Because the proposed project would result in GHG emissions which are less than the significance threshold of 1,100 MT per year of CO<sub>2</sub>e emissions, this impact is considered less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As previously stated in the environmental setting, pursuant to AB 32, CARB prepared and adopted the Climate Change Scoping Plan, which outlines the strategy to achieve the year 2020 GHG emissions limits specified in AB 32. The Climate Change Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California. However, CARB has not yet determined what amount of GHG reductions it recommends from local government operations. The Climate Change Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined.

The Santa Cruz Board of Supervisors approved a Climate Action Strategy (CAS) on February 26, 2013. The CAS outlines a course of action to reduce GHG emissions produced by governmental operations and community activities within unincorporated Santa Cruz County. Implementation of the CAS will build on the fact that Santa Cruz County has already met the 2020 emissions reduction target recommended by the state and will set the county on a path toward reducing emissions to 59 percent below 2009 levels by 2050.

The CAS articulates a broad strategy for reaching emission reduction goals, and then goes further to identify the individual programs, policies, and initiatives that, together, will move County operations and the community toward the goals. Strategies are included to reduce emissions in the major focus areas of transportation, energy, and solid waste.

The proposed project would not conflict with AB32, BAAQMD's Climate Protection Program, the CAS or other applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases because the total construction GHG emissions estimated for the proposed project would be below the BAAQMD significance threshold. Furthermore, the proposed project would only generate construction-related emissions, which would be temporary and only occur once. As stated in the environmental setting, the proposed project would not have an effect on the long-term operational emissions. Therefore, no impacts from conflicts with applicable plans, policies, or regulations are expected. No impact would occur.

## ***Hazards and Hazardous Materials***

### ***Environmental Setting***

The site was developed with the fire station between 1953 and 1956 with the associated structures built throughout the years. The fire station has a 500-gallon propane tank, a 1,000-gallon liquid fuel tank (combination gasoline and diesel) and additional liquid fuel storage containers onsite. The buildings onsite are over 50 years old and may contain the following hazardous materials that would need to be considered.

#### Asbestos

The Code of Federal Regulations (CFR), 40 CFR 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Federal Occupational Safety and Health Administration classify asbestos-containing material (ACM) as any material or product that contains more than 1% asbestos. Non-Friable ACM (any material containing more than 1% that cannot be pulverized under hand pressure) is classified as either Category I or Category II.

- Category I – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- Category II – all remaining types of non-friable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Activities that disturb materials containing any amount of asbestos are subject to certain requirements of the Cal/OSHA asbestos standard contained in Title 8, California Code of Regulations (CCR) § 1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor. Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M).

### Lead Paint

Construction activities (including demolition) that disturb materials or paints containing any amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, §1532.1. For a solid waste containing lead, the waste is classified as California hazardous when: 1) the representative total lead content exceeds the respective total threshold limit concentration of 1,000 milligrams per kilogram; or 2) the representative soluble lead content exceeds the respective soluble threshold limit concentration of 5 milligrams per liter based on the standard waste extraction test.

### Universal Waste

Universal wastes are common hazardous wastes that are generated by households and businesses and are generally not allowed to be disposed of in solid waste landfills. Universal wastes include such items as fluorescent light tubes and lamps (that contain mercury), mercury-containing switches and thermostats, polychlorinated biphenyls (PCB), chlorofluorocarbons, batteries, paints, oils, fuels, solvents, and some electronic equipment. This type of waste are subject to California's Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 23), which is overseen by the Department of Toxic Substances Control (DTSC).

Geocon Consultants, Inc. performed a survey of the site on July 6 and 7, 2015. Samples were tested for Asbestos (57 samples) and lead-containing paint (16 samples). In addition, the site was surveyed for any potential universal waste.

### **Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project replaces existing buildings, some of which are approximately 60 years old. The proposed project may include the transport, short-term storage and use, and disposal of hazardous materials related to construction, demolition, and operation and maintenance of the new facilities. BMPs stipulating proper storage of hazardous materials and vehicle fueling would be implemented during construction and demolition as part of the Stormwater Pollution Prevention Plan (SWPPP).

The Asbestos, Lead-Containing Paint, and Universal Waste Survey Report conducted by Geocon Consultants, Inc. (August 2015) indicated that asbestos was detected in floor tile, lead was detected in paint at low concentrations, and universal waste consisting of fluorescent lighting fixtures, various household chemicals (lubricants, solvents, cleansers, paints, etc.), and fuels were noted.

Demolition of the buildings could have a potential impact if the buildings are not demolished or disposed of properly. Asbestos, lead and universal waste are considered hazardous materials and as such are subject to the NESHAP regulations. MBUAPCD has adopted Rule 424, which provides for enforcement authority of the NESHAP. Additionally, Occupational Safety and

Health Administration (OSHA), the Labor Code, and Health & Safety Code require surveys and mandates minimum certification criteria for professionals who survey, demolish and dispose of anything containing asbestos and other hazardous substances. The purpose of these regulations is to protect the public from asbestos fiber releases from demolition and renovation activities.

Implementation of the following mitigation measures will ensure impacts would be less than significant.

#### **HAZ-1 Notification to the Monterey Bay Unified Air Pollution Control District**

CAL FIRE shall submit a NOTIFICATION OF DEMOLITION AND RENOVATION form to the Monterey Bay Unified Air Pollution Control District at least 30 days prior to demolition activities.

#### **HAZ-2 Demolition Requirements**

Demolition activities shall be performed under the direction of an Independent State Certified Asbestos Consultant with oversight performed by a State Certified Site Surveillance Technician. All materials shall be disposed of at an approved facility licensed to handle such waste.

#### **HAZ-3 Notification to Contractors and Building Occupants**

In accordance with OSHA Construction Asbestos Standards, CAL FIRE shall notify the following persons of the presence, location and quantity of asbestos or material presumed to contain asbestos at any concentration, at the work sites in their buildings and facilities:

1. Prospective contractors applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;
2. Employees who will work in or adjacent to areas containing such material;
3. All employers of employees who will be performing work within or adjacent to areas containing such materials; and
4. CAL FIRE staff who occupy areas containing such material or will be overseeing work conducted onsite.

#### **HAZ-4 OSHA Pre-job Notification**

In accordance with California Code of Regulations (CCR), Title 8, Section 1532.1(e), the contractor shall provide a written Pre-job Notification to the nearest Cal/OSHA office within 24 hours of the start of work.

#### **HAZ-5 Universal Waste**

In accordance with California's Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 23) and DTSC, the following shall be implemented:

1. Fluorescent light tubes shall be removed and managed for recycling.
2. Light ballasts that are unlabeled, or lacking a "No PCB's" designation on their labels, shall be removed from the light fixtures and managed as a hazardous waste.

3. Fuels and other highly flammable materials (solvents, paints, etc.) shall be stored in approved combustible storage cabinets.
4. Storage drums shall be stored on secondary (spill) containment pallets with spill kits (e.g. absorbent, berms, wipes, etc.) readily accessible in drum and fuel storage areas.
5. Removal of universal wastes or suspect hazardous materials from the project site for recycling or disposal shall be conducted by contractors licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hazardous materials, such as diesel fuel and oil, would be used during demolition, construction and operation and maintenance at the project site. The release of any hazardous substance to the environment would be prevented through the implementation of BMPs listed in the SWPPP and the mitigation measures identified in item (a) above. This impact would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within one-quarter mile of an existing or proposed school. The nearest school is Mountain Elementary School located one and a half miles from the site. No impact would occur.

d) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Cortese List was reviewed and included searches of the EnviroStor database maintained by DTSC, the GeoTracker database maintained by State Water Resources Control Board, and listings maintained by CalEPA. The nearest occurrence of such a site is a leaking underground storage tank cleanup site that was completed and closed located approximately one mile away. The site is not listed on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport is the Bonny Doon Village Airport (private) located approximately 10 miles southwest of the project site. No impact would occur.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in item (e), the nearest private single-runway airport is the Bonny Doon Village Airport, located approximately 10 miles southwest of the project site. No impact would occur.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no adopted emergency response plans or emergency evacuation plans for the area. All construction activities would occur onsite, other **than** construction traffic that would use Soquel San Jose Road to deliver construction materials. The amount of traffic generated would not be substantial in nature (see **Section XVI, Traffic and Transportation**), and access to and from the area can be accomplished via Laurel Glen Road and Mountain View Road to the south and Summit Road to the north. No impact would occur.

h) Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project is located in a high fire hazard severity zone. However, CAL FIRE would adhere to all Santa Cruz County General Plan Fire Hazard Policies and Standards. In addition, CAL FIRE will implement fire safe standards that they require of the public. Finally, the Soquel FFS was built to protect the public and structures from fire events and CAL FIRE staff are trained in responding to wildland fires. A less than significant impact would occur.

## ***Hydrology and Water Quality***

### ***Environmental Setting***

The proposed project is located within the Soquel Creek watershed, which is the second largest watershed in Santa Cruz County (San Lorenzo is the largest). The watershed drainage area consists of approximately 42 square miles. Soquel Creek empties into the Monterey Bay after flowing 50 miles from its headwaters at the crest of the Santa Cruz Mountains. Major tributaries include the west branch (Burns, Laurel, Hester Creek, Amaya Creek, Fern Gulch, Ashbury Gulch, Hinkley Creek, and numerous unnamed waterways) and the main branch (fed by Moore’s Gulch, Grover Gulch, Love Creek and Bate’s Creek). Smaller tributaries include Noble Gulch, Porter Gulch, Tannery Gulch and Borregas Creek. Sedimentation and impairment of important fish habitat have been identified as a resource concern in the watershed.

There are no natural drainages located on the project site. Surface waters near the project site include the West Branch of Soquel Creek (approximately 800 feet to the west) and Soquel Creek (approximately 660 feet to the southeast). It is expected that stormwater would drain to the west due to the steep elevation on the eastern portion of the property that gradually slopes to the west.

Domestic water supply within the Santa Cruz region is predominately provided by eight public agencies, small public water systems, and individual and shared wells and springs. Groundwater provides approximately 80% of public water agency supply, with the remainder coming from local surface water sources. The four major aquifers in the county include Aromas, Pajaro Valley, Purisima and Santa Margarita.

## **REGULATORY SETTING**

### **STATE WATER RESOURCES BOARD**

The Clean Water Act was amended in 1972 to prohibit discharge of pollutants to Waters of the U.S. from any point source unless it is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, further amendments to the CWA added Section 402(p), established a framework for regulating municipal and industrial storm water discharges

under the NPDES Program. In November 1990, the EPA finalized regulations establishing storm water permit requirements for specific industries. These regulations provide that storm water discharges to waters of the U.S. from construction projects with five or more acres of soil disturbance are prohibited unless the discharge is in compliance with the NPDES Permit. Further regulations (titled the Phase II Rule) which became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While EPA regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the California State Water Resources Control Board (SWRCB) has elected to adopt only one statewide General Permit that applies to the majority of storm water discharges associated with construction activities. On August 19, 1999, the State Water Board reissued the General Construction Storm Water Board amended Order 99-08-DWQ to apply to sites as small as one acre (SWRCB 2010).

The latest General Construction Permit (Order No. 2009-0009-DWQ), which the proposed project would comply with, was adopted on September 2, 2009. Order No. 2009-0009 DWQ created several new significant changes including, formal training requirements, online permitting and SWPPP documentation upload, minimum BMPs, Numeric Action Levels for pH and turbidity, as well as monitoring based on project risk to sediment loss and threat to receiving waters (SWRCB 2010).

## **SANTA CRUZ COUNTY CODE**

County Code pertaining to water quality and hydrology include the following:

### **Chapter 7.79 Runoff and Pollution Control**

The purposes of this chapter are to:

- (A) Protect the health, safety, and welfare of the public by protecting the surface and groundwater quality, groundwater recharge, beneficial uses, marine habitats, watershed health, and ecosystems of the receiving waters of the county, including the Monterey Bay, from discharge of pollutants and the adverse effects of hydromodification.
- (B) Comply with federal and state laws concerning stormwater. [Ord. 5117, 2012].

#### **7.79.100 Best management practices for construction activities.**

- (A) Prior to issuance of a county permit granted pursuant to SCCC Titles 12, 13, 14, 16 and 18, a stormwater pollution control plan addressing use of BMPs during construction shall be submitted for review and approval. The plan shall focus on measures to be installed while the project is under construction and include appropriate BMPs from the County Construction Site Stormwater Pollution Control BMP Manual.
- (B) The stormwater pollution control plan shall be implemented, installed and maintained for the duration of construction to prevent pollution of a storm drain system, receiving waters, groundwater, or a body of standing water. The stormwater pollution control plan shall be modified accordingly as the site changes during construction.

(C) Rainy season measures shall be installed from October 15th through April 15th. If rain occurs between April 15th and October 15th, adequate measures shall be taken by the responsible party to prevent stormwater pollution.

(D) Permits that do not involve ground disturbance shall only be required to include notes per the Housekeeping Requirements section in Section E of the Construction Site Stormwater Pollution Control BMP Manual. [Ord. 5117, 2012].

**7.79.110 Requirement to prevent, control, and reduce stormwater volume, runoff rate and pollutant load.**

(A) Requirement to Implement Best Management Practices (BMPs). All responsible parties shall implement appropriate BMPs, including any BMPs identified by the County, as needed to minimize contribution to pollution or contamination of the storm drain system, receiving waters, groundwater or a body of standing water.

(B) New Development and Redevelopment. All responsible parties shall mitigate impacts due to development and implement BMPs per the County Design Criteria adopted by the County of Santa Cruz and Chapters 16.20 and 16.22 SCCC to control the volume, runoff rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects to minimize the generation, transport, and discharge of pollutants, prevent runoff in excess of predevelopment conditions, and maintain predevelopment groundwater recharge. When such requirements are incorporated into the terms of land use entitlements or building permits, a violation of the conditions or construction specifications of such entitlement or permit is also a violation of this chapter.

(C) Responsibility to Implement BMPs. Notwithstanding the presence or absence of requirements promulgated pursuant to subsections (A) and (B) of this section, any person engaged in activities or operations or owning facilities or property which will, or may, result in pollutants entering stormwater, the storm drain system, receiving waters, groundwater, or a body of standing water shall implement BMPs to prevent and/or reduce discharge of such pollutants.

- (1) Activities, operations, and facilities include, but are not limited to: operation, maintenance, and repair of vehicles and construction equipment; use and disposal of chemicals such as paints, pool chemicals, pesticides, herbicides, and fertilizers; parking lots, gasoline stations, and loading docks; trucking, transportation, manufacturing, and processing facilities; waste disposal, recycling, scrap, and used parts operations; mobile steam or pressure washing operations; carpet cleaning; and construction projects.
- (2) Construction activities which may result in the release of pollutants to stormwater include, but are not limited to, grading, paving, pouring concrete, painting, and landscaping. Pollutants to be controlled at construction sites include in particular, but are not limited to, soil, sediment, and waste material during and immediately following construction. [Ord. 5117, 2012].

## **Chapter 16.22 Erosion Control**

The purpose of this chapter is to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, loss of fish habitat, damage to property, loss of topsoil and vegetation cover, disruption of water supply, and increased danger from flooding, and to implement Local Coastal Program land use policies. [Ord. 3337 § 1, 1982; Ord. 2982, 1980].

### **16.22.070 Runoff control**

Runoff from activities subject to a building permit, parcel approval or development permit shall be properly controlled to prevent erosion. The following measures shall be used for runoff control, and shall be adequate to control runoff from a 10-year storm:

(A) On soils having high permeability (more than two inches/hour), all runoff in excess of predevelopment levels shall be retained on the site. This may be accomplished through the use of infiltration basins, percolation pits or trenches, or other suitable means. This requirement may be waived where the Planning Director determines that high groundwater, slope stability problems, etc., would inhibit or be aggravated by onsite retention, or where retention will provide no benefits for groundwater recharge or erosion control.

(B) On projects where onsite percolation is not feasible, all runoff should be detained or dispersed over nonerodible vegetated surfaces so that the runoff rate does not exceed the predevelopment level. Onsite detention may be required by the Planning Director where excessive runoff would contribute to downstream erosion or flooding. Any policies and regulations for any drainage zones where the project is located will also apply.

(C) Any concentrated runoff which cannot be effectively dispersed without causing erosion shall be carried in nonerodible channels or conduits to the nearest drainage course designated for such purpose by the Planning Director or to on-site percolation devices. Where water will be discharged to natural ground or channels, appropriate energy dissipaters shall be installed to prevent erosion at the point of discharge.

(D) Runoff from disturbed areas shall be detained or filtered by berms, vegetated filter strips, catch basins, or other means as necessary to prevent the escape of sediment from the disturbed area.

(E) No earth or organic material shall be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water. [Ord. 4281 § 12, 1993; Ord. 3439 § 1, 1983; Ord. 3337 § 1, 1982; Ord. 2982, 1980].

### **16.22.100 Overall responsibility**

It shall be the responsibility of the owner and the permittee to ensure that erosion does not occur from any activity during or after project construction. Additional measures, beyond those specified, may be required by the Planning Director as deemed necessary to control accelerated erosion. [Ord. 3337 § 1, 1982; Ord. 2982, 1980].

## **Chapter 16.24 Water Quality Control**

### **16.24.030 Increase in turbidity**

Except as prescribed in SCCC 16.24.050, it shall be unlawful to increase the turbidity of any portion of any body of water in the following amounts:

(A) When natural turbidity measures between zero and 50 turbidity units, the increase shall not exceed 20 percent of natural turbidity;

(B) When natural turbidity measures between 50 and 100 units, turbidity may not be increased more than 10 units above natural turbidity;

(C) When natural turbidity measures above 100 units, the increase shall not exceed 10 percent of natural turbidity. [Ord. 2021, 1974].

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### **16.24.040 Increase in settleable solids**

Except as prescribed in SCCC 16.24.050, it shall be unlawful to increase settleable solids in any portion of any body of water in Santa Cruz County more than 0.5 milliliters per liter per hour above natural conditions of settleable solids. [Ord. 2021, 1974].

### ***Discussion***

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

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During project construction, water quality impacts and discharge could occur during storm events if proper controls are not implemented. Loose soils, chemical and fuel spills from vehicles and equipment or miscellaneous construction materials and debris could be transported off-site in overland flow, degrading surface and groundwater quality. During a heavy rainfall, runoff from construction areas could flow off-site and reach nearby surface water drainage facilities. The proposed project is subject to the State Water Resources Control Board and the statewide NPDES stormwater permit for construction. Specifically, CAL FIRE will submit a SWPPP to the Central Valley Regional Quality Control Board that will identify BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements.

Although CAL FIRE does not need to obtain any discretionary permits from the County of Santa Cruz, the County Codes related to water quality standards and waste discharge requirements will be adhered to. The proposed project's drainage plan would be designed by a registered civil engineer to safely manage the conveyance of stormwater runoff. A less than significant impact would occur.

b) Would the project 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 that would not support existing land uses or planned uses for which permits have been granted)?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project would not deplete groundwater supply or interfere with groundwater recharge. The proposed project is replacing an existing facility that is served by an existing water supply well. No increase in personnel will occur as a result of the replacement. The water well will continue to provide adequate water supply to the new Soquel FFS and the demand for water will remain unchanged. A less than significant impact would occur.

c) Would the project 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 on- or off-site erosion or siltation?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would require grading and an additional paved area will be created. This new pavement would cause an increase in impervious surfaces compared to the existing ground conditions of compacted dirt, gravel and paving. The proposed project includes the installation of a permanent drainage system with erosion and sedimentation control features. In addition, a SWPPP would be required and would provide BMPs to be incorporated during project construction and post-construction to prevent future erosion and siltation. Implementation of proper temporary and long-term post construction erosion and sediment control BMPs and installation of retaining walls would minimize potential erosion or siltation on or off-site during and following construction. A less than significant impact would occur.

d) Would the project 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 on- or off-site flooding?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As indicated in item (c) above, the project would increase impervious surfaces onsite compared to the existing ground conditions of compacted dirt, gravel and paving. The proposed project's drainage plan would be designed by a registered civil engineer to safely retain, detain and/or convey stormwater runoff. Implementation of BMPs during construction

would ensure that flooding would not occur on- or off-site. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As mentioned in items (c) and (d), the proposed project would slightly increase the amount of impervious surfaces on-site and would increase the amount of runoff from the project site. Implementation of BMPs and the installation of on-site drainage infrastructure would increase the site's capacity to control runoff. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please see item (a) of the **Hazards and Hazardous Materials** Environmental Checklist and Discussion in section 4.8 regarding potential hazardous substances on-site. The proposed project would adhere to all state, federal and local regulations regarding discharge of effluent and would not discharge any materials or substances that may degrade water quality. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located within a 100-year flood hazard area and is not mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map or other flood delineation map. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in item (g), the proposed project is not located within a 100-year flood hazard area. Therefore, no structures would impede or redirect flood flows. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Based on the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FIRM Map No. 06087C0237E, effective date May 16, 2012, and Map No. 060087C0245E, effective date May 16, 2012), the site is not located in a zoned flood area and does not appear to be located within a watershed or drainage basin with significant upstream reservoirs or impoundments (dams). No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Would the project result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is located approximately five miles away from the Pacific Ocean at an elevation of approximately 300 feet. Therefore, the potential for inundation from a seiche, tsunami, or mudflow hazard area is very low. No impact would occur.

## **Land Use and Planning**

### **Environmental Setting**

The State of California and state-owned land are not subject to local city or county land use and zoning regulations. However, the state is subject to the requirement under CEQA to assess project-related impacts that may occur as a result of conflicts between existing and proposed land

uses. The project was reviewed to determine consistency with Santa Cruz County’s plans and policies.

The project site is designated as Public Facility/Institutional in the 1994 General Plan and Local Coastal Program for the County of Santa Cruz, California. The project site consists of 2.6 acres, and the proposed project would be built within the property boundaries. Surrounding properties are designated Rural Residential and zoned Rural Agricultural and range in size from 2.5 to 20 acres.

**Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located on a site that has been developed with a forest fire station since the early 1950s. The surrounding community is rural in nature and the replacement of the forest fire station will not create a division within this community. No impact would occur as a result of the project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is designated as Public Facility/Institutional (P) in the County of Santa Cruz General Plan (1994) and zoned Residential Agricultural (RA). The project proposes to replace the current fire station with a modern facility within the property.

The P designation allows for public and quasi-public facility uses including schools and university facilities, fire stations, churches, hospitals, cemeteries, sanitary landfills, and water supply and treatment facilities. The Santa Cruz General Plan Policy 2.21.2 indicates that public facilities are allowed in all urban residential land use designations and zoning districts as well as limited public facility uses in commercial designations and districts.

The public forest fire station is consistent with the general plan and will not conflict with the P designation or RA zone. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located within an area that is included in a habitat conservation plan or natural community conservation plan. No impact would occur.

## **Mineral Resources**

### **Environmental Setting**

Santa Cruz County is known to provide important mineral resources for industrial and construction purposes including bituminous rock, cement, clay, lime and limestone, sand, gravel, and crushed rock. There are eight active quarries throughout Santa Cruz County:

- *Olive Springs Quarry* – Located west of Nisene Marks State Park and the Soquel Demonstration State Forest and consists of approximately 48 acres. Mines granite for construction aggregate.
- *Hanson Quarry/Kaiser Quarry* - Located within the Sandhills habitat west of Scotts Valley and consists of approximately 200 acres. Mines sandstone for sand.
- *Felton Quarry* – Located west of Felton and comprises approximately 86 acres. Mines granite for construction aggregate.
- *Olympia Quarry/Lonestar Quarry* – Located within the Sandhills habitat west of Scotts Valley and consists of approximately 70 acres. Mines sandstone for sand.
- *Bonny Doon Limestone and Shale Quarry* – Located in Bonny Doon and comprises 234 acres. Mines for marble and shale for cement production.
- *Wilder Quarry* – Located near Wilder Ranch State Park and consists of approximately 66 acres. Mines sandstone for sand.
- *Quail Hollow Quarry* – Located within the Sandhills near Quail Hollow County Park. Comprises approximately 105 acres and mines sandstone for sand.
- *Cabrillo Sand and Gravel* – Located on Freedom Boulevard in Aptos and comprises approximately 4 acres. Mines sand and gravel for construction and landscaping.

The Surface Mining and Reclamation Act of 1975 requires the identification and classification of mineral resources in areas within the state that are subject to urban development or other land uses that could otherwise prevent the extraction of important mineral resources. These Mineral

Resource Zones (MRZs) are classified by the State Geologist by analyzing associated geologic and economic factors. There are four general classifications based upon the State Geologist’s determination of identified mineral resource significance. The four classifications are as follows:

- MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3:** Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ.

The mineral land classification map from the California Department of Conservation identifies areas within Santa Cruz County that have been mapped as having mineral resources. The boundary of the mapping generally stretches along the coast from Rio Del Mar to Four Mile Beach and inland to the outskirts of Wildwood. The map boundaries meander inland south from Wildwood to the outskirts of Aptos.

Most of the area mapped fall into the category of MRZ-4 where information is inadequate for assignment. The second most mapped category falls within MRZ-3, which are areas that contain mineral deposits that cannot be determined significant from available data. Smaller areas are mapped as MRZ-2 and MRZ-1.

**Discussion**

a) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not designated or zoned as mining resources and has never been mined. The project site is not located within any of the areas that have been mapped by the California Department of Conservation, and no known mineral resources occur onsite. The nearest active quarry, Olive Springs Quarry, is approximately .8 miles northeast of the project site. No impacts would occur.

b) Would the project 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not designated in the Santa Cruz County General Plan, or other land use plan, as having locally important mineral resources. No impact would occur.

## **Noise**

### ***Environmental Setting***

The Soquel FFS is located in a rural residential area. The closest residence to the site is approximately 80 feet north of the property line. Additional residential development is located to the east, west and south ranging in distance from approximately 150 feet to 220 feet.

Noise is considered a subjective reaction and is a sound that is loud, unpleasant, unexpected or undesired. Noise is measured in A-weighted decibels, abbreviated dBA, which is an expression of the relative loudness of sounds in air as perceived by the human ear. The decibel is the unit used to measure the intensity of a sound. The A-weighted sound level has become the standard tool to measure environmental noise.

The noise for an area is described as ambient noise level and includes the noise level associated with a particular environment. A common way to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour).

The day-night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The additional decibels are added during the nighttime as people are more sensitive to nighttime noise exposures.

The existing ambient noise environment in the vicinity of the project site is characterized as rural and low noise levels. The primary noise source in the vicinity of the proposed project is from roadway traffic on Soquel San Jose Road and the occasional sirens from fire event activity during a fire incident. Typical hourly daytime and nighttime noise levels at property lines for rural residential areas are expected to be in the 45 dBA to 60 dBA range during the daytime hours (7 am to 10 pm) and between 35 dBA and 45 dBA during the nighttime hours (10 pm to 7 am).

### **Santa Cruz County General Plan Noise Element**

The Noise Element in the Santa Cruz County General Plan establishes threshold criteria for new commercial or industrial development, construction activities and new residential development.

#### ***Policy 6.9.1 Land Use Compatibility Guidelines***

Require new development to conform with the Land Use Compatibility Guidelines (Figure 6-1). All new residential and noise sensitive land developments should conform to a noise exposure standard of 60 dB L<sub>dn</sub> (day/night average noise level) for outdoor noise and 45 dB L<sub>dn</sub> for indoor use. New development of land that cannot be made to conform to this standard shall not be permitted. Assure a compatible noise environment for various land uses through site planning,

building orientation and design, interior layout, and physical barriers, landscaping, and buffer areas where appropriate.

**Policy 6.9.4 Commercial and Industrial Development**

For all new commercial and industrial developments which would increase noise levels above the maximum allowable standards of the Land Use Compatibility, the best available control technologies will be used to minimize noise levels. In no case shall the noise levels exceed:

- Hourly Leg of 50 dBA during daytime (7 am to 10 pm) and 45 dBA during nighttime (10 pm to 7 am)
- Maximum level (Lmax) of 70 dBA during daytime and 65 dBA during nighttime, and
- Maximum level of impulsive noise of 65 dBA during daytime and 60 dBA during nighttime.

**Policy 6.9.7 Construction Noise**

Require mitigation of construction noise as a condition of future project approval.

**Discussion**

a) Would the project create exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During the construction of the proposed project, noise from construction activities would add to the noise environment in the immediate vicinity around the project site. Activities involved in construction would generate maximum noise levels, as indicated in Table 5, ranging from 78 to 85 dBA at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime hours.

**Table 5. Construction Equipment Noise**

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compactor	83
Dozer	82
Dump Truck	76
Excavator	81
Grader	85
Paver	85
Roller	80
Trencher	81

Source: Construction Noise Handbook, U.S. Department of Transportation, Federal Highway Administration

The operational noise levels will not change from the current conditions. During construction noise would also be generated by increased truck traffic on area roadways. Additional noise would be generated by the transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would occur during daytime hours.

As shown in the following Table, the estimated hourly sound levels are worst-case estimates.

**Table 6. Predicted Construction Noise Levels (Worst-Case Period)**

Construction Phase	Equipment List	Hourly Sound Levels
<b>(12 Months)</b>		
Months 1-7	<ul style="list-style-type: none"> <li>• Excavators</li> <li>• Back hoes</li> <li>• Riding compactor</li> <li>• Grader</li> <li>• Dump truck</li> </ul>	55 dBA leq/59 dBA Lmax 55 dBA Leq/56 dBA Lmax 55 dBA Leq/62 dBA Lmax 59 dBA Leq/63 dBA Lmax 51 dBA Leq/55 dBA Lmax <b>Cumulative 62.5 dBA Leq – 63 dBA Lmax</b>

Source: j.c. brennan 2013

The Santa Cruz County General Plan has maximum daytime noise standards for hourly Leg of 50dBA, maximum level (Lmax) of 70 dBA, and a maximum level of impulsive noise of 65 dBA. It is estimated that construction activities may exceed the hourly Leq standard. The existing noise environment at the project site is expected to be in the 45 dBA to 60 dBA range during daytime hours. The Santa Cruz County General Plan Noise Element has a policy (Policy 6.9.7) that requires mitigation of construction noise as a condition of future project approval. Implementation of **Mitigation Measure NOISE-1** would reduce noise levels to a less than significant level at the project site as required under Policy 6.9.7. A less than significant impact would occur.

**NOISE-1 Construction Noise Reduction**

1. Construction shall be limited to the hours of 7:00 am and 8:00 pm on weekdays.
2. Exceptions to the specified construction hours shall be allowed only for construction emergencies and when requested by the Department of Public Works and approved by the County Planning Department.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project create exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Some types of construction equipment can produce vibration levels that can cause architectural damage to structures and be annoying to nearby sensitive receptors. Vibration

levels generated during construction of the proposed project would vary during the construction period, depending upon the construction activity and the types of construction equipment used. Groundborne vibration is measured in peak particle velocity (PPV).

Caltrans has developed guidance for groundborne vibration caused by construction. The “Transportation and Construction Vibration Manual” (September 2013) identifies the point at which people respond to groundborne vibration as well as criteria that identifies the point at which structural damage could occur. The following Tables are referenced from the Caltrans guidance.

**Table 7. Guideline Vibration Potential Threshold Criteria**

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Transportation and Construction Vibration Manual, September 2013.

**Table 8. Guideline Vibration Annoyance Potential Criteria**

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: Transportation and Construction Vibration Manual, September 2013.

Recent environmental analysis for CAL FIRE projects identified vibration levels for various construction equipment and they are presented in Table 8 below.

**Table 9. Vibration Levels for Varying Construction Equipment**

Type of Equipment	Peak Particle Velocity @ 25 feet	Approximate Velocity Level @ 25 feet
Large Bulldozer	0.089 (inches/second)	87 (Vdb)
Loaded Trucks	0.076 (inches/second)	86 (Vdb)
Small Bulldozer	0.003 (inches/second)	58 (Vdb)
Auger/Drill Rigs	0.089 (inches/second)	87 (Vdb)
Jackhammer	0.035 (inches/second)	79 (Vdb)
Vibratory Hammer	0.070 (inches/second)	85 (Vdb)
Vibratory Compactor/roller	0.210 (inches/second)	94 (Vdb)

Source: j.c. brennan 2013

The nearest residence is approximately 80 feet to the north. This residence is a newer residence and would not be subject to vibration that would damage the structure. All the PPVs for construction equipment at 25 feet are lower than the threshold of 1.0 (older residence threshold is 0.5). Additionally, although construction vibration would occur, it would be barely perceptible and would not result in a significant annoyance. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project is replacing a current facility and the operations would not change. The new Soquel Demonstration State Forest office may be used for some additional meetings, but these will be rare and would not create a significant increase in traffic or other operations that would increase ambient noise levels above the existing levels. The impact would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Would the project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demolition and construction of the new forest fire station would result in a temporary increase in the ambient noise levels in the project vicinity. However, as discussed in item (a), construction would be temporary and only occur during daytime hours. In addition, the implementation of mitigation measures N-1 would reduce impacts associated with a temporary increase in ambient noise levels to a less than significant level.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is located approximately 11 miles southeast from the Watsonville Municipal Airport and is not located within an airport land use plan. The proposed project

would not expose people residing or working in the project area to excessive noise levels. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The closest private airstrip is the Bonny Doon Village Airport, located approximately 11 miles to the west. The project would not expose people residing or working the project area to excessive noise levels. No impact would occur.

## **Population and Housing**

### **Environmental Setting**

The proposed project is located approximately four miles north of Soquel at 4750 Soquel San Jose Road and is under the planning jurisdiction of Santa Cruz County. The 2.6-acre parcel is surrounded by rural residential development and woodlands and forest. Approximately two miles to the northeast is CAL FIRE's Soquel Demonstration State Forest, which is bordered on the south by the California State Park's Forest of Nisene Marks State Park. The proposed project would replace the existing Soquel FFS and Soquel Demonstration State Forest Education-Office Trailer on the existing site.

### **Discussion**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project does not propose any new homes or businesses or change the existing capacity of the Soquel FFS or Soquel Demonstration State Forest Education-Office Building. The current maximum staffing levels for the one-engine forest fire station during normal staffing situations include one captain and three firefighters, for a total of four onsite during some shifts. During a fire incident, maximum staffing levels would be two fire captains and six fire firefighters for a total of eight personnel. The replacement station would retain this staffing level and no new employees would be hired.

The Soquel Demonstration State Forest Education-Office Building will also replace the existing trailer that is used by approximately four to six resource management personnel. The use and staffing levels will not change as a result of the new building.

The proposed project will be built to support existing uses onsite. No new homes, road extensions or other infrastructure are included as a part of the project that would induce population growth. No impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is located on state property within a rural residential area. Most project activities will occur onsite and would not extend beyond the property boundaries except for the driveway improvements which would extend onto Soquel San Jose Road. The proposed project will not displace existing homes and no impact would occur as a result of project implementation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in item (b), the proposed project will replace existing facilities onsite and no other project features will occur offsite that would displace people living in the area. No impact would occur.

**Public Services**

**Environmental Setting**

The project site is located in Soquel within a rural unincorporated portion of Santa Cruz County. The public agencies that provide services to the Soquel FFS are the Central Fire District, the Davenport, Live Oak, Soquel and Summit Sheriff’s Office, Mountain Elementary School District and the Santa Cruz High School District. The nearest county park, Anna Jean Cummings, is located approximately four miles to the south at 461 Old San Jose Road, Soquel.

**Discussion**

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?				
Schools?				
Parks?				
Other Public Facilities?				

Fire protection?  
 Police protection?  
 Schools?  
 Parks?  
 Other Public Facilities?

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**Fire protection?**

As indicated in the environmental setting, the proposed project lies within the central fire protection district. Santa Cruz County contracts with CAL FIRE to provide fire protection management and services including operational oversight and supervision of all career and volunteer firefighters, administration, access to state resources, training and various other services. During non-wildland fire season, CAL FIRE provides 24-hour, 7 days per week coverage with the five state fire stations. Volunteer firefighters constitute the majority of Santa Cruz County’s fire staff.

The replacement of the Soquel FFS will enhance these services and the new Soquel Demonstration State Forest facility will provide the public with a more conducive learning environment. No impacts would occur as a result of the proposed project.

**Police protection?**

The Davenport, Live Oak, Soquel and Summit Service Center of Santa Cruz County Sheriff’s Office provides police protection services to the area. The office is located approximately six miles southwest of the project site at 870 17<sup>th</sup> Avenue in Santa Cruz County. CAL FIRE personnel are onsite year round and provide their own security protection measures working closely with law enforcement. The proposed project would not require the need for additional police protection that would cause environmental impacts. No impacts would occur.

**Schools?**

Mountain Elementary School District, is a small, one-school district serving students from kindergarten through sixth grade and the Santa Cruz High School district serves the project area. The proposed project replaces an existing facility and will not result in additional staff. The project would not require new or altered schools or related facilities. No impact would occur.

**Parks?**

The proposed project would not create additional demand on the nearby 95-acre Anna Jean Cummings Park. The replacement of the existing Soquel FFS will not add additional employees that would require new or altered park facilities. No impact would occur.

**Other public facilities?**

The Soquel FFS replacement project will not create additional demand for public facilities within the area. The project would replace an existing use and will not add additional population to the area. No impact would occur.

**Recreation**

**Environmental Setting**

The proposed project is situated in a rural area that is comprised of steep terrain and woodland and forested areas. The Soquel FFS is approximately two miles west of The Forest of Nisene Marks State Park and two miles south of the Soquel Demonstration State Forest property. The SDSF main public entrance is located on Highland Highway six miles east of Soquel San Jose Road and 10 miles east of Highway 17. The nearest county park, the 95-acre Anna Jean Cummings Park, is located approximately four miles to the south. No other recreational facilities are near the project site.

**Discussion**

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project consists of demolition and replacement of an existing fire station. The new facility will have the same capacity and will not increase the current staffing levels. The proposed project will not add residential uses or other activities that would increase the use of existing neighborhood or regional parks or other recreational facilities. No impact would occur.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities. The proposed project is demolishing and replacing an

existing fire station and will not add additional staff or residential uses that would increase population. No impact would occur.

## ***Transportation/Traffic***

### ***Environmental Setting***

A traffic assessment was prepared for the proposed Project by KD Anderson & Associates, Inc. (August 27, 2015). The purpose of the assessment was to collect information on potential traffic impacts that could occur with the implementation of the proposed project.

## **REGULATORY BACKGROUND**

The County of Santa Cruz General Plan was adopted by the Board of Supervisors in May 1994 and includes policies that are applicable to circulation and transportation. Policy 3.12.1 LOS Policy notes that LOS C should be considered the objective, but LOS D is the minimum acceptable where costs, right-of-way requirements or environmental impacts to maintain LOS under policy are excessive, capacity enhancement may be considered infeasible. Proposed development projects that would cause LOS on an uninterrupted roadway segment to fall below D during the weekday peak hour will be required to mitigate their traffic impacts. Proposed projects that would add traffic on a segment already at LOS E or F shall also be required to mitigate any traffic volume resulting in a 1% increase in the volume/capacity ratio.

Santa Cruz County Department of Public Works is responsible for county roads and administers design review for driveway encroachments. The proposed access design will be reviewed by the county for conformance with county standards.

## **EXISTING ROADWAY NETWORK**

The project site is located at 4750 Soquel San Jose Road, which provides both regional and direct access. Soquel San Jose Road links the site with State Route (SR) 1 in Soquel to the south and with SR 17 via Summit Road to the north.

Soquel San Jose Road is a two-lane rural collector highway that originates at the Soquel city limits north of SR 1 and continues northerly for roughly 10 miles along terrain that would be classified as rolling to mountainous. The roadway generally features two 12-foot wide travel lanes and paved shoulders of varying width. The posted speed limit is 40 mph in the immediate area of the station. A new 24-hour traffic count conducted by KD Anderson identified the weekday daily traffic volume in the area of the project at 5,131 vehicles per day.

## **TRAFFIC IMPACT ANALYSIS METHODOLOGY**

Quantitative Level of Service (LOS) analysis was performed for the study area roadway segments based on the methodologies contained in the *2010 Highway Capacity Manual (2010 HCM)* published by the Transportation Research Board. LOS analysis is used to identify the relative delay experienced by motorists traveling on two-lane rural highways. A grading scale of LOS "A"

to LOS "F" is used to describe the quality of traffic flow, with LOS A representing free-flowing conditions along facilities with adequate passing opportunities and LOS F representing conditions where travel speeds are constrained by factors such as truck traffic, limited passing opportunities and roadway alignment. For this analysis the directional peak hour LOS was calculated. This analysis addresses the capacity and LOS on Soquel San Jose Road in the eight mile long area from Laurel Glen Road to Summit Road.

## **EXISTING TRAFFIC OPERATIONS AND LEVEL OF SERVICE**

The daily traffic volume on Soquel San Jose Road is 5,131 vehicles per day at the project site. Over the course of the day 37% of the traffic was northbound and 63% was southbound. A total of 727 vehicles were counted during the highest volume hour (i.e., 4:30 to 5:30 p.m.). At that time the flow of traffic was primarily southbound (85%), which may be indicative of motorists using Soquel San Jose Road as an alternative to SR 17. Based on roadway width (i.e., 11-12 foot wide travel lanes), width of paved shoulders (1-3 feet), limited passing opportunities (90% no passing), and truck percentage (2-4%) the roadway would operate at LOS D during peak traffic hour.

## **CUMULATIVE IMPACTS**

The extent to which the proposed project contributes to cumulative traffic impacts has been evaluated based on long term future traffic conditions on Soquel San Jose Road. The Association of Monterey Bay Area Governments (MBAG) maintains a regional travel demand forecasting model that is recognized by Santa Cruz County for the purpose of analysis under CEQA. MBAG technical staff was contacted by KD Anderson & Associates, and year 2035 daily traffic volume forecasts were obtained for the study area. See discussion in item (b) below.

## **SITE DISTANCE**

Site distance was observed in the field by KD Anderson & Associates and compared to applicable minimum standards identified in the Caltrans Highway Design Manual (HDM). The posted speed limit on Soquel San Jose Road is 40 mph, and at that speed the minimum safe stopping distance (HDM Table 201.1) is 300 feet. The corner sight distance requirement prescribed in HDM Table 405.1A is 440 feet at 40 mph.

To the north, the alignment of Soquel San Jose Road is straight and is somewhat limited by an existing cut-bank just north of the driveway. A southbound vehicle would become visible at a distance of 500 feet. The alignment of Soquel San Jose Road curves to the west in the area just south of the site access, and site distance is limited by trees and other vegetation on the inside of the curve. Looking south from the existing driveway, the available sight distance is 360 feet. Based on comparison to available standards, the available sight distance to the north meets both minimum and corner sight distance requirements. Looking to the south the minimum requirement is satisfied, but the corner sight distance is not available. This indicates that northbound motorists would be able to see exiting vehicles in time to stop, but the actions of exiting vehicles may cause approaching traffic to slow as it overtakes entering vehicles.

Measures to improve sight distance would involve elimination of obstructions along the line of sight looking to the south. However, while some obstructions are inside the highway right of way

and could be removed as part of regular maintenance, the majority of the trees and vegetation blocking the line of sight are outside of the right of way on private property.

**Discussion**

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As indicated in the environmental setting, the daily traffic volume is 5,131 vehicles per day and 727 vehicles were counted during the highest volume hour. This results in a LOS D during peak traffic hour.

The proposed project would not change site occupancy and will unlikely increase the volume of traffic to Soquel San Jose Road on a regular basis after construction is completed. The project could add 10 to 20 construction generated trips to Soquel San Jose Road during typical commute hours. Although this may represent a 1 to 2% increase from the current volume, the resulting traffic volume would still be indicative of LOS D conditions. This would result in a less than significant impact.

b) Would the project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

See discussion for item (a). The proposed project would generate some traffic during construction, but will not lower the current LOS D conditions. The proposed project would not increase vehicle trips during operations as the capacity of the facility will not change.

Cumulative Traffic Conditions

The MBAG traffic model indicates that the volume on Soquel San Jose Road north of Laurel Glen Road may increase to 6,800 vehicles per day by the year 2035. This represents an increase of 33% over the current volume counted. Assuming that the existing pm peak hour volume of 727 vehicles per hour increased at that rate, the pm volume could be 967 in the year 2025. Assuming that the current directionality remained, the two-lane roadway would operate at LOS E. LOS E exceeds Santa Cruz County’s General Plan minimum LOS D standard.

The 2014 Santa Cruz County Regional Transportation Plan identifies improvement projects anticipated over the next 20 years. Work on Soquel San Jose Road is identified below. However, while these improvements may provide localized operational and safety benefits, the overall LOS on Soquel San Jose Road would remain at LOS E.

ID	Project Title	Project Description/Scope	Estimated Total Cost
CO-P36	Soquel-San Jose Road Improvements (Paper Mill Road to Summit Road)	Roadway and roadside improvements including bike lanes, sidewalks, transit, turnouts, left turn pockets, merge lanes and intersection improvements	2.5 million

Because the regular operation of the project will not generate appreciably more traffic that currently occurs, the project will not increase the traffic volume anticipated on Soquel San Jose Road in the future. Thus the project's cumulative traffic impact is less than significant.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Potentially Significant Impact <input type="checkbox"/>	Less Than Significant with Mitigation Incorporated <input type="checkbox"/>	Less Than Significant Impact <input type="checkbox"/>	No Impact <input checked="" type="checkbox"/>
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As indicated in the Hazards and Hazardous Materials (VIII.) section discussion item (e), the project site is not located within an airport land use plan and there are no airports within two miles of the project site. The closest private airport is the Bonny Doon Village Airport located approximately 10 miles southwest of the project site. Construction of the proposed project would be short-term, construction-related trips. There will not be an increase in operational vehicle trips as the project is not increasing capacity. No changes to air traffic patterns would occur. No impact would occur.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant Impact <input type="checkbox"/>	Less Than Significant with Mitigation Incorporated <input checked="" type="checkbox"/>	Less Than Significant Impact <input type="checkbox"/>	No Impact <input type="checkbox"/>
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**Site Distance**

Development of the project with access as proposed will alter the available sight distance somewhat as the access moves slightly to the north and improvements are installed. The view to the north from the proposed location could be similar to that which occurs today, however, the project includes a retaining wall that could interfere with the line of site, depending upon its final location and height. Similarly, vegetation on the cut-bank north of the driveway may eventually interfere with sight distance.

The view to the south from the new driveway location will be similar to that occurring today, and the same issues associated with obstruction along the curve will remain. While minimum standards will be satisfied additional measures regarding vegetation management would provide better sight distance. Additional coordination with property owners may be necessary after implementation of the following mitigation measures. With implementation of the following mitigation measures, impacts would be less than significant.

### **TRAF-1 Vegetation**

Prior to operation of the new Soquel FFS, CAL FIRE shall contact Santa Cruz County to identify and remove trees and vegetation within the public right of way that interfere with corner sight distance to the south.

### **TRAF-2 Road Improvement Plans**

Prior to construction of the proposed project, the road improvement plans must meet the minimum site distance requirement established by Santa Cruz County.

#### Left Turn Lane Channelization

Separate left turn lanes are provided to allow following traffic to safely maneuver around vehicles waiting to turn left. The need for a left turn lane at the project access has been considered based on traffic volume guidelines published by the American Association of State Highway and Transportation Officials (AASHTO) in *Policy on Geometric Design of Highways and Streets (2004)*. Exhibit 9-75 introduces the combination of opposing and advancing traffic volumes and turning traffic that would justify a left turn lane based on design speed.

For Soquel FFS, most traffic entering the site will occur during the morning when the volume of traffic on Soquel San Jose Road is low. During that time, the combination of traffic turning left, advancing traffic, and opposing traffic falls far below the level justifying a left turn lane. Overall background traffic volumes are much greater in the evening, but because the southbound volume is low a left turn lane would not be justified at this time. Impacts would be less than significant.

#### Acceleration and Deceleration

The extent to which specific features are needed to facilitate safe use of the new driveway has been assessed. The shoulder of northbound Soquel San Jose Road has been widened in the area south of the driveway for about 600 feet through the Olive Springs Road intersection. The shoulder is generally 6 to 10 feet wide in this area and provides room for vehicles to slow outside the flow of through traffic. The proposed mitigation provides for an 8-foot wide paved shoulder, which will ensure impacts are less than significant.

Acceleration areas can help by providing space for entering vehicles to gain speed prior to the arrival of approaching northbound traffic. However, acceleration lanes can also give motorists an unjustified expectation of right of way over approaching traffic, and undersized acceleration areas can contribute to additional conflicts between merging vehicles.

**TRAF-3 Acceleration and Deceleration**

Prior to construction of the proposed project, the road improvement plans shall provide for an 8-foot wide paved shoulder along the northbound lane to the driveway apron for safe deceleration and turning movements onto the project site.

Turn Radius

The key issue associated with vehicles entering Soquel San Jose Road is the radius of the curb return on the north side of the driveway. The curb return radius is short (i.e., 10 feet), but a passenger vehicle making a right turn will be able to stay within the northbound travel lane while completing the turn. The speed of this maneuver will, however, be relatively slow, and motorist attempting to turn right at a higher speed in order to use a short gap in northbound traffic will either do so from the south side of the driveway or encroach into the southbound lane on Soquel San Jose Road. A full acceleration lane is not required for the proposed project. However, a larger curb radius consistent with the speed of travel on Soquel San Jose Road would reduce impacts to less than significant. The following mitigation measure will ensure impacts would be less than significant.

**TRAF-4 Turn Radius**

Prior to construction of the proposed project, the road improvement plans shall provide an appropriate curb radius along the north side of the driveway consistent with applicable Caltrans and Santa Cruz County traffic engineering standards (*County of Santa Cruz Design Criteria, Containing Standards for the Construction of Streets, Storm Drains, Sanitary Sewers, Water Systems, Driveways. June 2014*).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Would the project result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As previously stated in item (d), the existing access driveway has constraints for turning movements for some vehicles that would use this facility. The driveway will be designed according to applicable engineering standards for adequate access in case of an emergency. A less than significant impact would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not conflict with public transportation programs, plans, or policies. The project would not result in alteration of any existing facilities nor interfere with construction

of any future planning facilities that are intended to serve alternative modes of transportation. No impact would occur.

## Utilities and Service Systems

### Environmental Setting

The proposed project is located approximately six miles northeast of Soquel, California at 4750 Soquel San Jose Road in Santa Cruz County. The current Soquel FFS receives water supply from an existing well located onsite.

The project site is within County Service Area (CSA) 12, which provides funding for septic management services in unincorporated areas of Santa Cruz County that are not served by sewer systems. CSA 12 is served by individual septic systems for wastewater disposal. Septic systems are considered onsite wastewater treatment systems (OWTS) by the SWRCB. OWTS are defined as individual septic systems (SWRCB 2012). The Soquel FFS is served by an existing OWTS that is classified under Tier 1 Low-Risk New or Replacement OWTS by the SWRCB. This tier applies to new or replacement OWTS that meet low risk siting and design requirements, where there is not an approved Local Agency Management Program (Tier 2). Santa Cruz County does not have an approved Local Agency Management Program MOU with the SWRCB at this time. The OWTS policy became effective on May 13, 2013 to protect water quality and public health.

The project site is located within the CSA 9C for solid waste services. The zone supports administration of the refuse and recycling franchise collection program, landfill environmental compliance programs, refuse abatement programs, and waste reduction and recycling programs. Waste from the unincorporated areas of the county and Scotts Valley is directed to the 126-acre Buena Vista Landfill, which is owned and operated by the County of Santa Cruz.

### Discussion

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Soquel FFS is currently using an OWTS septic system and all wastewater is treated onsite. The new Soquel FFS and SDSF office would require the relocation of the leach field from the northeastern portion of the site to the southeastern portion of the site. The proposed standard septic system would consist of approximately 2,100 square feet, 2,500 gallon septic tank, and a four-inch main. The proposed wastewater system will be reviewed and approved by Santa Cruz County's Environmental Health Department. The permitting process requires percolation testing in order to ensure that the soil is capable of absorbing the waste. In addition, the new septic system will adhere to the SCRCB and Central Coast Regional Water Quality Control Board OWTS Policy. No impact would occur.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As indicated in item (a), the proposed project includes the replacement of the site’s existing sewer system and leach field. The new septic system will be constructed within the project site and will replace the current septic system. The current facility receives water from an existing on-site water supply well that will be retained and used for the proposed project.

No other new water or wastewater treatment facilities would be constructed or expanded. A less than significant impact would occur.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project includes the installation of a new storm water drainage system. The new storm water drainage system will disturb soils on-site. As required under the Clean Water Act, a SWPPP will be prepared to ensure that all applicable BMPs are implemented and to minimize the movement of sediment (see **Section IX. Hydrology and Water Quality**). Impacts would be less than significant.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project will use the existing water supply well located on-site that provides sufficient water. A new water tank for fire suppression will be constructed onsite and filled, but no new wells or additional entitlements will be required as the proposed project will not increase capacity. Impacts would be less than significant.

e) Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As indicated in item (a) and (b), the project would replace the existing septic system on-site. The new septic system would be subject to all applicable county and state requirements. No impact would occur.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The demolition and removal of the existing facility will need to be disposed of in a landfill. The facilities contain hazardous materials consisting of asbestos, lead paint and universal waste (see Section VIII Hazards and Hazardous Waste). The disposal of this type of waste will be handled by a treatment storage and disposal facility that is permitted and regulated by the California Department of Toxic Substances Control. This disposal of such waste will occur during demolition and will not be ongoing.

The Soquel FFS is currently served by the Santa Cruz County's Buena Vista Landfill. According to the Santa Cruz County Local Agency Formation Commission's draft *County Service Area 9, County Public Works Services 2015 Service and Sphere Review* document (July 2015), Buena Vista Landfill has sufficient capacity for approximately 20 more years. The proposed project will continue to use this landfill and no increases in capacity will be needed. No impact would occur.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Waste generated by the proposed project would comply with statutes and regulations related to solid waste. Please see **Section VIII, Hazards and Hazardous Materials** related to disposal of hazardous waste. No impact would occur.

## Mandatory Findings of Significance

### Discussion

- |  |                                |  |                              |                          |
|--|--------------------------------|--|------------------------------|--------------------------|
| a) Would the project have the potential to substantially 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, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory? | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                |
|  | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/> |

With mitigation measures described in this initial study, the proposed project would not have a significant impact on fish and wildlife species or their habitat or eliminate important examples of major periods of California history or prehistory.

- |   |                                |  |                              |                          |
|---|--------------------------------|--|------------------------------|--------------------------|
| b) Would 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.) | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                |
|   | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/> |

A search of the CEQAnet Database and the Santa Cruz County list of current and archived projects were reviewed.

**Table 10. Current and Proposed Projects in the Project Area**

Project Name	Type of Project	Location
Jose and Rodriguez Subdivision	Residential subdivision	Santa Cruz 1000 Rodriguez Street
Davenport Recycled Water Project	Water storage and treatment	Davenport
Staub Field Camp	Education, research and recreation	Santa Cruz County 900 Schoolhouse Gulch Road
Pasatiempo Water Storage Tank	Golf Course	Santa Cruz County Sims Road
Mount Hermon Youth Recreation Center	12-acre outdoor recreational-educational facility	Scott’s Valley Graham Hill Road
Johnson Grading	Single family residence and associated facilities	Corralitos area Freedom Boulevard
Castle Rock State Park Entrance Relocation	Demolition and construction of new facilities for recreation	Los Gatos 15435 Skyline Boulevard

<b>Project Name</b>	<b>Type of Project</b>	<b>Location</b>
Chaminade Lane Grading	Single-family dwelling and driveway	Santa Cruz County
Graham Hill Road Bridge Storm Damage Repair Project	Repair bridge	Santa Cruz County
Heart of Soquel Master Site Plan	Outdoor park facilities	Soquel
North Rodeo Gulch 4.75 Stream Bank Stabilization	Retaining wall, rock slope protection, revegetation and new asphalt	Santa Cruz County
Nelson Road Re-establishment	Removal of access road crossing, restoration and permanent road	Santa Cruz County
Juvenile Hall Recreation Facility	6,880 square foot multi-use recreation and programs facility	3650 Graham Hill Road Santa Cruz County
Smith Road Culvert Replacement	Culvert replacement	Santa Cruz County
Paulson Road Culvert Replacement	Replacement of three metal culverts	Santa Cruz County
Pasatiempo Sewering Sphere of Influence & Annexation	Santa Cruz Local Agency Formation Commission annexation of 238 parcels	Graham Hill Road Santa Cruz County
Pajaro River Excavation	Excavate excess sediment to improve flood carrying capacity	Santa Cruz and Monterey County
Interim Programmatic Habitat Conservation Plan	IPHCP to cover 3,606 parcels for June beetle	Santa Cruz County and Scotts Valley
Bonny Doon Limestone Quarry Boundary Expansion Project	Extend mining plan boundary by 17.1 acres	Santa Cruz County
Atkinson Lane PUD	Specific Plan and PUD for 34.7 acres	Santa Cruz County
East Cliff Drive Bluff Protection and Parkway Project	Construction of bluff protection structure; parkway construction and improvements; and construction of the hook bluff protection structure	Santa Cruz County
Soda Lake Facility Expansion Project	Reconfiguration of a set of earthen levee embankments	Santa Cruz County
Scotts Valley Transit Center Low Impact Development Retrofit Project	Improvements to existing stormwater control measures and increasing infiltration capacity	Scotts Valley
Master Permit for Environmental Enhancement	Removal of 0.125 acres of bulrush from an existing pond and restoration of California red-legged frog habitat.	Santa Cruz County
Corralitos Creek Diversion	Work on Corralitos Creek	Watsonville

Based on the list of current and proposed projects above, it is unlikely that incremental effects of the proposed project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.

None of the current or recent prior projects are located within the vicinity of the proposed project. Environmental factors that have been identified as potentially significant including Aesthetics, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Noise and Transportation and Traffic, are limited to the project site and would not contribute substantially to cumulative effects. Noise and traffic impacts are short-term in nature and limited to the duration of construction-related activities and would not contribute to a permanent impact with regard to cumulative impacts.

Other environmental factors that have a potential to contribute to cumulative effects are air quality and greenhouse gases. Construction-related impacts would not exceed MBUAPCD significance thresholds and long-term operational impacts would not change the amount of operational emissions over current conditions because the proposed project is replacing an existing facility with the same operational capacity within the existing air basin.

As discussed in the Greenhouse Gas Section XII, neither the MVUAPCD nor Santa Cruz County has established a threshold for determining the significance of the GHG emissions; therefore, the BAAQMD *Adopted Air Quality CEQA Thresholds of Significance – June 2, 2010* significance threshold was applied. The proposed project would solely generate construction-related emissions, which would be temporary and only occur once. The proposed project would not have an effect on the long-term operational emissions.

Implementation of mitigation measures listed in this initial study would reduce potentially adverse impacts to a less than significant level.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Direct and indirect impacts to human beings would be less than significant with the implementation measures listed in this initial study.

**Appendix A**  
**Soquel Forest Fire Station Replacement Project**  
**Mitigation and Monitoring Plan**

In accordance with CEQA Guidelines Section 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a mitigation monitoring and reporting plan (MMRP) that ensures compliance with mitigation measures required for project approval. The California Department of Forestry and Fire Protection (CAL FIRE) is the lead agency for the above-listed project and has developed this MMRP as a part of the initial study-mitigated negative declaration (IS/MND) supporting the project. This MMRP lists the mitigation measures developed in the IS-MND which were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the mitigation measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

Mitigation Measure	Monitoring Activity/Timing/Frequency/Schedule	Implementation/Responsibility/Verification	Responsibility for Oversight of/Compliance/Verification	Outside Agency Coordination	Comments
<p><b>Mitigation Measure AES-1</b>            The retaining walls constructed onsite shall be tan in color and split faced to provide texture in accordance with Santa Cruz County's Site, Architectural and Landscape Design Review Ordinance.</p>	<p><b>Activity:</b> Colored retaining walls and split-faced for texture.</p> <p><b>Timing:</b> During construction.</p> <p><b>Frequency:</b> Once.</p>	<p style="text-align: center;"><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p> <p style="text-align: center;"><b>Construction Contractor</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p style="text-align: center;"><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p style="text-align: center;">N/A</p>	

<p><b>Mitigation Measure AES-2</b>  In accordance with Santa Cruz County’s Site, Architectural and Landscape Design Review Ordinance landscaping shall be used to soften the visual impact of buildings, walls and other site improvements. Trees, shrubs and vine species shall be used which offer variety of shapes and sizes with an emphasis on drought tolerant (water efficient), native plant materials. Shrubs shall be a minimum of five gallon in size and trees shall be a minimum of 15-gallon in size. Plantings shall be of vegetative character of the surrounding area to the extent possible and shall be sufficient to provide screening when mature.</p>	<p><b>Activity:</b>  Landscaping Plan and planting of trees, vines and shrubs to soften visual impact of retaining walls.</p> <p><b>Timing:</b>  Landscaping Plan prior to construction. Plantings to occur post construction.</p> <p><b>Frequency:</b>  Once</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p> <p><b>Construction Contractor</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p>Possible coordination with Santa Cruz County</p>	
<p><b>Mitigation Measure AES-1</b>  Prior to construction, a lighting plan for the Project site specifying the location and type of exterior light sources shall be prepared by CAL FIRE. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on</p>	<p><b>Activity:</b>  Lighting Plan</p> <p><b>Timing:</b>  Prior to construction.</p> <p><b>Frequency:</b>  Once.</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>			

<p>the northern and southern boundary of the Soquel Forest Fire Station property.</p>					
<p><b>BIO-1 Pre-Construction Nesting Survey</b></p> <p>1. Conduct a pre-construction nesting bird survey of all suitable habitat on the Project site within 7 days prior to the commencement of construction during the nesting season (February 1 through August 31). Pre-construction nesting surveys are not required for construction activity outside of the nesting season (September 1 through January 31).</p> <p>2. If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in accordance with CDFW recommendations for buffer distances relative to the species identified. Once construction activities commence on-site, all nests will be continuously monitored by a qualified biologist (or forester) to</p>	<p><b>Activity:</b> Conduct pre-construction clearance survey.</p> <p><b>Timing:</b> Within 7 days prior to construction activities.</p> <p><b>Frequency:</b> Once.</p>	<p><b>CAL FIRE Forester or Biologist</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		

<p>detect any behavior changes as a result of construction of the proposed Project. If behavioral changes are observed that may result in adverse effects to the success of breeding, the work causing the change shall cease and consultation with CDFW shall be initiated to identify potential avoidance and minimization measures. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. No ground-disturbing or construction activities can occur within the buffer until the fledglings are capable of flight and become independent of the nesting tree. Once the young are independent of the nest, no further measures are necessary and construction may commence.</p>					
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<p><b>Mitigation Measure CUL-1</b>  CAL FIRE shall ensure that ground disturbance is monitored during subsurface excavations, demolition and removal of the buildings, and grading of the Project site. This work will be performed by a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist. This work shall be done by a CAL FIRE or other professional archaeologist working in close consultation with a CAL FIRE archaeologist. The CAL FIRE staff archaeologist shall determine the timing and duration of the required monitoring.</p> <p>Should subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt and the professional archaeologist shall evaluate the significance of the find. If the archaeologist determines that the resource is significant, an evaluation and development of appropriate recommendations for conservation and</p>	<p><b>Activity:</b> Conduct monitoring during ground disturbance.</p> <p><b>Timing:</b> During initial ground disturbance.</p> <p><b>Frequency:</b> During all initial ground disturbing activities.</p>	<p><b>CAL FIRE Archaeologist</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		
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<p>management shall be prepared in consultation with appropriate experts.</p>					
<p><b>Mitigation Measure CUL-2</b>          In the event that evidence of human remains is discovered, construction activities shall be halted and the Santa Cruz County Coroner, a CAL FIRE Archaeologist, the Native American Heritage Commission are to be notified of the discovery. If the coroner determines that the remains are Native American, the coroner must contact the California NAHC. CEQA Guidelines, Public Resources Code Section 5097.94 and Section 7050.5 of the Health and Safety Code specify procedures to be followed in the event of discovery of human remains on non-Federal Land. Upon request, the NAHC will provide a list of Most Likely Descendants, who will specify treatment and disposition of any Native American remains found within the area of APE for the Project.</p>	<p><b>Activity:</b>          Unanticipated human remains discovery, determination and relocation.</p> <p><b>Timing:</b> During construction.</p> <p><b>Frequency:</b>          As required.</p>	<p><b>CAL FIRE Archaeologist</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		

<p><b>HAZ-1 Notification to the Monterey Bay Unified Air Pollution Control District</b>  CAL FIRE shall submit a NOTIFICATION OF DEMOLITION AND RENOVATION form to the Monterey Bay Unified Air Pollution Control District at least 30 days prior to demolition activities.</p>	<p><b>Activity:</b>  Remove all materials containing asbestos and dispose in approved hazardous waste facility.</p> <p><b>Timing:</b>  Prior to demolition of existing buildings.</p> <p><b>Frequency:</b>  Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>  <p><b>State Certified Asbestos Consultant</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>  <p><b>State Certified Site Surveillance Technician</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		
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<p><b>HAZ-2 Demolition Requirements</b>  Demolition activities shall be performed under the direction of an Independent State Certified Asbestos Consultant with oversight performed by a State Certified Site Surveillance Technician. All materials shall be disposed of at an approved facility licensed to handle such waste.</p>	<p><b>Activity:</b>  Notification to appropriate contractors and CAL FIRE employees.</p> <p><b>Timing:</b>  Prior to demolition of existing buildings.</p> <p><b>Frequency:</b>  Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		
<p><b>HAZ-3 Notification to Contractors and Building Occupants</b>  In accordance with OSHA Construction Asbestos Standards, CAL FIRE shall notify the following persons of the presence, location and quantity of asbestos or material presumed to contain asbestos at any concentration, at the work sites in their buildings and facilities:</p> <ol style="list-style-type: none"> <li>1. Prospective contractors applying or bidding for work whose employees reasonably can be expected to work in or adjacent to</li> </ol>	<p><b>Activity:</b>  Removal of loose and flakey lead based paint materials.</p> <p>Profile all waste materials and conduct work in accordance with lead safe work practices.</p> <p>Disposal of lead based materials in accordance with hazardous waste disposal requirements.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p> <p><b>Construction Contractor</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		

<p>areas containing such material;</p> <p>2. Employees who will work in or adjacent to areas containing such material;</p> <p>3. All employers of employees who will be performing work within or adjacent to areas containing such materials; and,</p> <p>4. CAL FIRE staff who occupy areas containing such material or will be overseeing work conducted onsite.</p>	<p><b>Timing:</b> Prior to demolition of existing buildings.</p> <p><b>Frequency:</b> Once.</p>				
<p><b>HAZ-4 OSHA Pre-job Notification</b> In accordance with California Code of Regulations (CCR), Title 8, Section 1532.1(e), the contractor shall provide a written Pre-job Notification to the nearest Cal/OSHA office within 24 hours of the start of work.</p>	<p><b>Activity:</b> Characterization and profile the universal waste.</p> <p><b>Timing:</b> Prior to construction.</p> <p><b>Frequency:</b> Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p> <p><b>Construction Contractor</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		

<p><b>HAZ-5 Universal Waste</b> In accordance with California’s Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 23) and DTSC, the following shall be implemented:</p> <ol style="list-style-type: none"> <li>1. Fluorescent light tubes shall be removed and managed for recycling.</li> <li>2. Light ballasts that are unlabeled, or lacking a “No PCB’s” designation on their labels, shall be removed from the light fixtures and managed as a hazardous waste.</li> <li>3. Fuels and other highly flammable materials (solvents, paints, etc.) shall be stored in approved combustible storage cabinets.</li> <li>4. Storage drums shall be stored on secondary (spill) containment pallets with spill kits (e.g. absorbent, berms, wipes, etc.) readily accessible in drum and fuel storage areas.</li> <li>5. Removal of universal wastes or suspect hazardous materials from the project site for recycling or disposal shall be conducted by</li> </ol>	<p><b>Activity:</b> Provide Hazardous Building Materials Survey to awarded contractor.</p> <p><b>Timing:</b> Prior to construction activities.</p> <p><b>Frequency:</b> Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p> <p><b>Construction Contractor</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		
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<p>contractors licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.</p>					
<p><b>NOISE-1 Construction Noise Reduction</b></p> <p>1. Construction shall be limited to the hours of 7:00 am and 8:00 pm on weekdays.</p> <p>2. Exceptions to the specified construction hours shall be allowed only for construction emergencies and when requested by the Department of Public Works and approved by the County Planning Department.</p>	<p><b>Activity:</b> Construction hours limited.</p> <p><b>Timing:</b> During construction.</p> <p><b>Frequency:</b> Ongoing.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		
<p><b>TRAF-1 Vegetation</b></p> <p>Prior to operation of the new Soquel FFS, CAL FIRE shall contact Santa Cruz County to identify and remove trees and vegetation within the public right of way that interfere with corner sight distance to the south.</p>	<p><b>Activity:</b> .</p> <p><b>Timing:</b> During construction.</p> <p><b>Frequency:</b> Ongoing.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p>Possible coordination with property owners on west side of Soquel Road.</p>	

<p><b>TRAF-2 Road Improvement Plans</b> Prior to construction of the proposed Project, the road improvement plans shall meet the minimum site distance requirement established by Santa Cruz County.</p>	<p><b>Activity:</b> Road improvement plans to meet site distance standards.</p> <p><b>Timing:</b> Prior to construction.</p> <p><b>Frequency:</b> Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p>Possible coordination with Santa Cruz County.</p>	
<p><b>TRAF-3 Acceleration/Deceleration</b> Prior to construction of the proposed Project, the road improvement plans shall provide for an 8-foot wide paved shoulder along the northbound lane to the driveway apron for safe deceleration and turning movements onto the Project site.</p>	<p><b>Activity:</b> Road improvement plans to provide an 8-foot shoulder along property frontage standards.</p> <p><b>Timing:</b> Prior to construction.</p> <p><b>Frequency:</b> Once.</p>	<p><b>CAL FIRE Engineer or Project Director</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>	<p><b>CAL FIRE</b></p> <hr/> <p>Initials</p> <hr/> <p>Date</p>		

<b>TRAF-4 Turn Radius</b> Prior to construction of the proposed Project, the road improvement plans shall provide an appropriate curb radius along the north side of the driveway consistent with applicable Caltrans and Santa Cruz County traffic engineering standards.	<b>Activity:</b> Road improvement plans to show appropriate curve radius.  <b>Timing:</b> Prior to construction.  <b>Frequency:</b> Once.	<b>CAL FIRE Engineer or Project Director</b>	<b>CAL FIRE</b>	Possible coordination with Santa Cruz County	
		<hr/> Initials	<hr/> Initials		
		<hr/> Date	<hr/> Date		

To be signed when all mitigation measures have been completed:

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Signature

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Christina Snow, Senior Environmental Planner  
CAL FIRE

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Date

## LIST AND DEFINITION OF ACRONYMS AND SYMBOLS USED IN THIS DOCUMENT

### Acronyms

AASHTO	American Association of State Highway Transportation Officials
AC	Asphalt Concrete
A.D.	anno Domini (Latin) (it means “in the year of the Lord”)
ADA	American Disabilities Act
ADT	Average Daily Trips
AMBAG	Association of Monterey Bay Area Governments
APE	Area of Potential Effect
APP	Apparatus
AQAP	Air Quality Attainment Plan
ARB	Air Resources Board
BMPs	Best Management Practices
CA	California
CAL FIRE	California Department of Forestry and Fire Protection
CAPCOA	California Air Pollution Control Officers Association
CAR	Climate Action Reserve
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection (changed to CAL FIRE in 2007)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historical Resources Information System
CNDDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent (a standard unit to measure global warming potential)
CRHR	California Register of Historic Resources
CSOHP	California State Office of Historic Preservation
CVRWQCB	Central Valley Regional Water Quality Control Board
dB	decibel
DBH	Diameter at Breast Height
DTSC	Department of Toxic Substances Control
<i>et seq.</i>	<i>et sequens</i> (Latin) (it means “and the following”)
<i>et al.</i>	<i>et alii</i> (Latin) (it means “and others”)
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESBA	Emergency Services Building Act
FESA	Federal Endangered Species Act
FFS	Forest Fire Station
FIA	Forest Inventory and Assessment

FMMP	Farmland Mapping and Monitoring Program
GIS	Geographic Information System
GHG	Greenhouse Gas
H	Historic (As used in CA-TRI-1374H, means this is a historic site)
HWY	Highway
IRA	Initial Response Area
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
km	kilometer(s)
kWh	kilowatt hour (of electricity)
LAFCO	Local Agency Formation Commission
LEED	Leadership in Energy and Environmental Design
LF	Linear Feet
LOS	Level of Service
LPG	Liquid Propane Gas
LSAA	Lake or Streambed Alteration Agreement
LTO	Licensed Timber Operator
m	meter(s)
M.A.	Master of Arts
MBTA	Migratory Bird Treaty Act
MN	Magnetic North
MND	Mitigated Negative Declaration
MMRP	Mitigation, Monitoring, and Reporting Plan
MS	Microsoft
MT	Metric Tons
N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
n.d.	no date
NDDDB	Natural Diversity Data Base
NE	Northeast
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NW	Northwest
NWIC	Northwest Information Center
NOI	Notice of Intent (to adopt a negative declaration or mitigated negative declaration)
OPR	(Governor's) Office of Planning and Research
PCC	Portland Cement Concrete
Ph.D.	Doctor of Philosophy
PM10	Particulate Matter less than 10 microns in diameter
P.O.	Post Office
PRC	Public Resources Code
PVC	Poly-Vinyl Chloride
RPF	Registered Professional Forester
RTP	Regional Transportation Plan
RWQCG	Regional Water Quality Control Board

SCCC	Santa Cruz County Code
SCH	State Clearinghouse
SDSF	Soquel Demonstration State Forest
SE	Southeast
SW	Southwest
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resource Control Board
THP	Timber Harvesting Plan
TN	True North
USGS	United States Geological Survey
W	West
WWII	World War II

**Symbols**

§	Section
#	Number
%	Percent

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