County of Santa Cruz

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: December 11, 2018 **Application Number:** 181146

Project Name: San Vicente Redwoods **Staff Planner:** Randall Adams

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Land Trust of Santa Cruz County will oversee the construction of trails and implementation of the San Vincente Redwoods Public Access Plan.

APN(s):

Main tract:	058-011-01	063-031-02	080-011-12	080-011-41
	058-011-10	063-071-01	080-011-14	080-011-42
	058-011-11	080-011-03	080-011-36	080-021-05
	058-022-04	080-011-06	080-011-37	080-021-07
	063-011-01	080-011-09	080-011-38	080-331-01
	063-011-09	080-011-10	080-011-39	080-331-02
Laguna Tract:	062-101-01	063-101-09		

OWNER: Peninsula Open Space Trust and Sempervirens Fund own the property. The Save the Redwoods League holds the Conservation Easement.

SUPERVISORAL DISTRICT: 3

PROJECT LOCATION: The project site, comprised of the main tract and Laguna Tract properties, is located in the Santa Cruz Mountains in unincorporated Santa Cruz County. The main tract is located north of Highway 1, east of Swanton Road, south of Jamison Creek Road, and west of Empire Grade. The Laguna Tract is located north of Smith Grade, east of Pine Flat Grade, south of Ice Cream Grade and west of Empire Grade. As shown on Figure 1, the project site is in the Bonny Doon planning area of the *County of Santa Cruz General Plan and Local Coastal Program*.

Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

SUMMARY PROJECT DESCRIPTION:

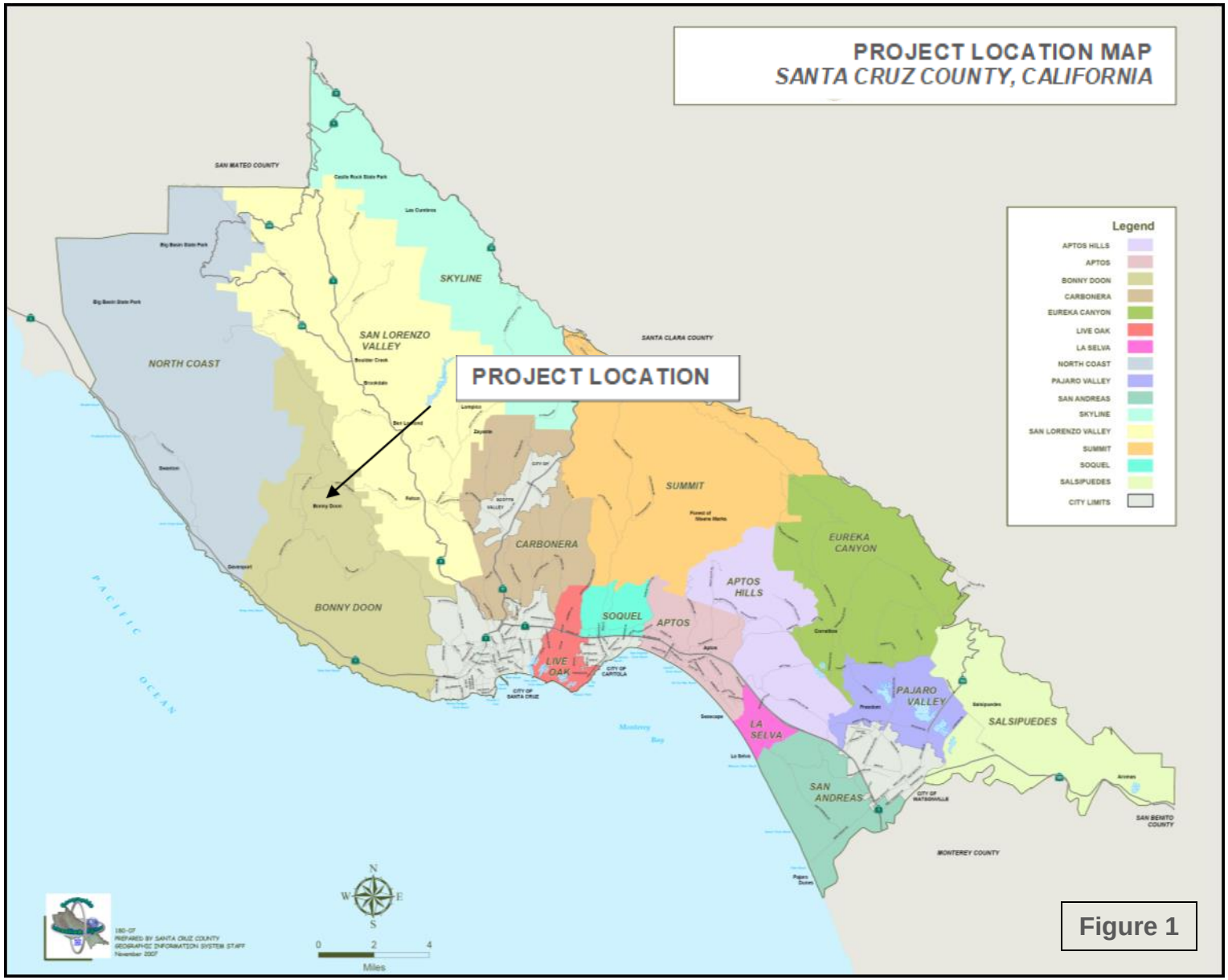
The project consists of two main components: 1) the approval and implementation of the proposed San Vincente Redwoods Public Access Plan, and 2) the construction and operation of a parking area and multiple use trail system in the San Vicente Redwoods of the Santa Cruz Mountains. As shown on

Figure 2, the project site is composed of multiple parcels (and APNs) in two separate areas that make up approximately 8,500 acres: 1) the main tract, an 8,160-acre property is located between the California Department of Corrections and Rehabilitation's (CDCR) Ben Lomond Conservation Camp off of Empire Grade to the north and the Bureau of Land Management's (BLM) Cotoni-Coast Dairies property (part of the California Coastal National Monument) off of Highway 1 to the south, and 2) the Laguna Tract, a 373-acre property located to the southeast of the main tract and adjacent to the California Department of Fish and Wildlife's (CDFW's) Bonny Doon Ecological Reserve.

The proposed San Vicente Redwoods Public Access Plan would provide a phased program for public access on the property for recreation, research, and education. The proposed San Vicente Redwoods Public Access Plan includes goals, policies, and implementation strategies, as well as design and maintenance guidelines, and construction protocols to ensure resource protection.

The proposed parking area would include roads for access and circulation, parking for vehicles and bicycles, and access features such as gates, restroom building with vault toilets, trailheads, and storage. The conceptual trail alignment would be located on a combination of newly constructed trails and existing timber harvest roads on the main tract and would be located on existing informal trails on the Laguna Tract. The proposed trails would be available for: hiking, biking, horse riding, dog walking (on-leash only), small group gatherings, as well as nature observation. Areas to be closed to public access were identified based on review of sensitive biotic resources, erosion risk, water resources and potential hazards, and the plan for public access was developed in consultation with ecologists and wildlife biologists. The conceptual trail alignment was prepared through an iterative process including field review by professional trail designers, civil engineers, biologists, and archaeologists, and reviewed by a geotechnical engineer.

The proposed San Vicente Redwoods Public Access Plan would be implemented in multiple phases as shown on Figure 2. The first phase would include the construction of the parking area with up to 50 parking spaces, 8.4 miles of trails on the main tract that would be easily accessible from the parking area, and 1.5 miles of trails on the Laguna Tract to form a connecting loop to the existing adjacent trails in CDFW's Bonny Doon Ecological Reserve. The second phase would include 9.3 more miles of trails on the main tract and up to 40 more parking spaces. The third phase would include 16.5 more miles of trails on the main tract. Subsequent phases would include 2.3 more miles of trails near previously built trails on the main tract. The phase one trails would occur over a one-year period, while phases two and three would occur over separate and subsequent three-year periods.


PROJECT LOCATION MAP
SANTA CRUZ COUNTY, CALIFORNIA
PROJECT LOCATION
Legend
APTOS HILLS
APTOS
BONNY DOON
CARBONERA
EUREKA CANYON
LIVE OAK
LA SELVA
NORTH COAST
PAJARO VALLEY
SAN ANDREAS
SKYLINE
SAN LORENZO VALLEY
SUMMIT
SOQUEL
SALSIPUEDES
CITY LIMITS
SAN MATEO COUNTY
SANTA CLARA COUNTY
MONTEREY COUNTY
SAN BENITO COUNTY
PACIFIC OCEAN
Miles
Figure 1

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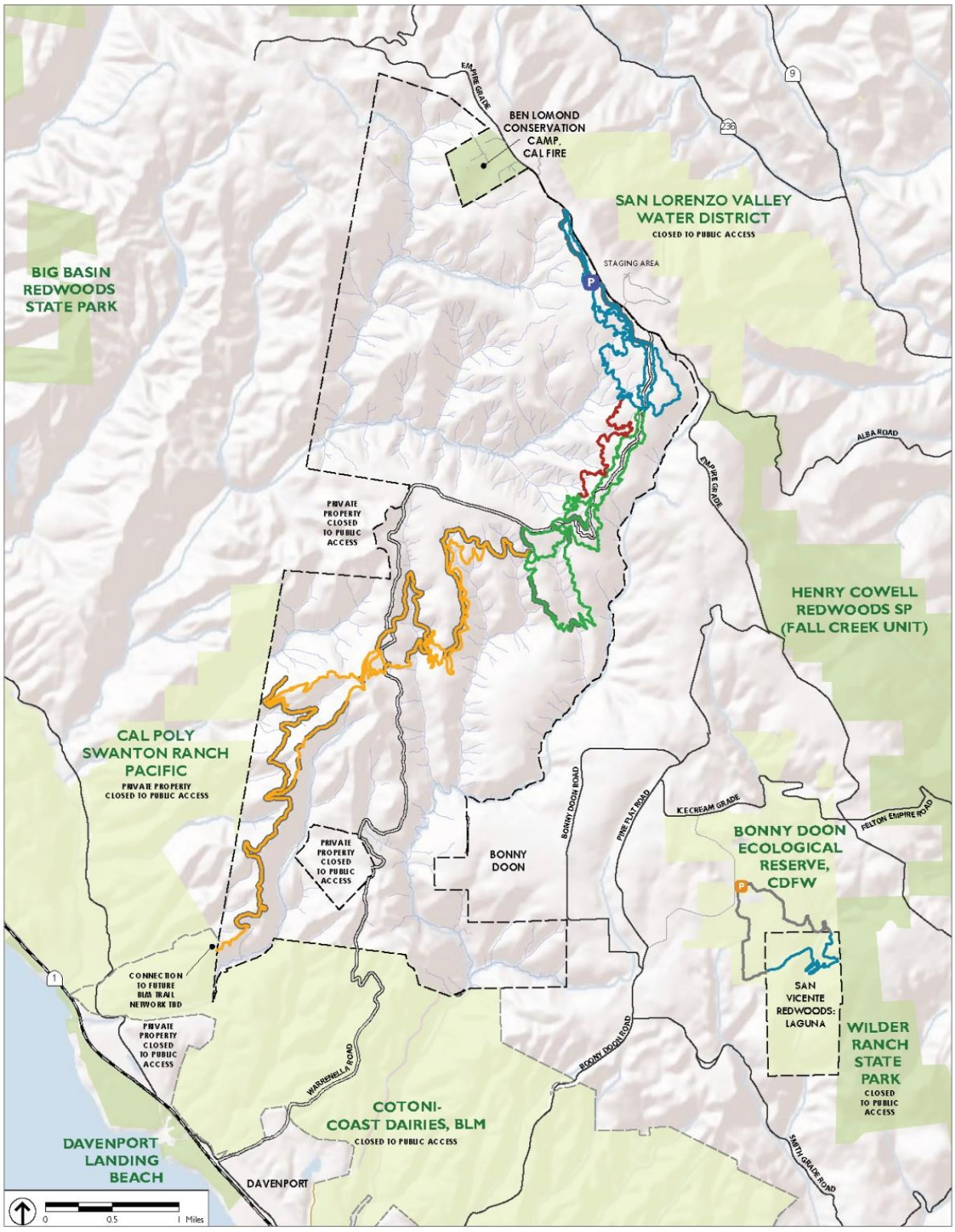

Project Site Plan **Figure 2**

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

- ☐ Aesthetics and Visual Resources
- ☒ Agriculture and Forestry Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☐ Geology and Soils
- ☒ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☒ Hydrology/Water Supply/Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☒ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- ☐ General Plan Amendment
- ☐ Land Division
- ☐ Rezoning
- ☒ Development Permit
- ☐ Sewer Connection Permit
- ☒ Coastal Development Permit
- ☒ Grading Permit
- ☒ Riparian Exception
- ☐ LAFCO Annexation
- ☐ Other:

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):

Permit Type/Action	Agency
Coastal Development Permit	County of Santa Cruz & California Coastal Commission
Streambed Alteration Agreement	California Department of Fish and Wildlife
Portable Construction Equipment Wood Chipping - Portable Registration	Monterey Bay Air Resources District
Wetland Delineation*	State Water Resources Control Board & United States Army Corps of Engineers

*Wetland delineation will determine if Section 401 and Section 404 permits will be required

CONSULTATION WITH NATIVE AMERICAN TRIBES: *Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?*

No California Native American tribes traditionally and culturally affiliated with the area of Santa Cruz County have requested consultation pursuant to Public Resources Code section 21080.3.1.

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 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.

STEPHANIE HANSEN, Environmental Coordinator

February 7, 2019
Date

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres):	Main tract: 8,159 acres on twenty-four contiguous parcels Laguna Tract: 373 acres on two contiguous parcels
Existing Land Use:	Historically used for timber harvesting and contain dirt logging roads; some active logging operations also occur
Vegetation:	Mixed evergreen forest, live oak woodland, chaparral, seasonal wetlands, and streams/riparian

Slope in area affected by project (parking area): ☒ 0 - 30% ☐ 31 – 100% ☐ N/A

Nearby Watercourse: Big Creek, Little Creek, San Vicente Creek, Molino Creek, and Laguna Creek

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	Mapped WSW on portions of site	Fault Zone:	Not mapped or identified on site
Groundwater Recharge:	Mapped GW Recharge	Scenic Corridor:	Empire Grade
Timber or Mineral:	Mapped Timber resource	Historic:	Not designated
Agricultural Resource:	Not mapped or identified on site	Archaeology:	Mapped arch. Resource
Biologically Sensitive Habitat:	Mapped biotic resource	Noise Constraint:	Not mapped or identified on site
Fire Hazard:	Mapped critical fire hazard on portions of site	Electric Power Lines:	Electric transmission lines on site
Floodplain:	Not mapped	Solar Access:	N/A
Erosion:	Areas of increased erosion potential on portions site	Solar Orientation:	N/A
Landslide:	Areas of potential landslides mapped on portions site	Hazardous Materials:	None
Liquefaction:	Not mapped or identified on site	Other:	N/A

SERVICES:

Fire Protection:	CAL FIRE (County Fire Department)	Drainage District:	None
School District:	Bonny Doon Union Elementary and San Lorenzo Valley Unified	Project Access:	Empire Grade
Sewage Disposal:	Septic/vault toilets	Water Supply:	N/A

PLANNING POLICIES:

Zone District:	TP (Timber Production) & SU (Special Use)	Special Designation:	N/A
General Plan:	R-M (Mountain Residential) & AG (Agricultural)		
Urban Services Line:	☐ Inside	☒ Outside	
Coastal Zone:	☒ Inside (Laguna tract & lower portion of Main tract)	☒ Outside (Upper portion of Main tract including parking area and upper trails)	

A. ENVIRONMENTAL SETTING AND PROJECT BACKGROUND:

The project site is located in unincorporated Santa Cruz County in the San Vicente Redwoods of the Santa Cruz Mountains. The main portion of the project site is an 8,159-acre property (main tract) that is generally situated between the Ben Lomond Conservation Camp off of Empire Grade to the north and the BLM Cotoni-Coast Dairies property to the south. The second, smaller portion of the project site is a 373-acre property (Laguna tract) to the south of the Bonny Doon Ecological Reserve with access from Martin Road.

Regional access to the project area is provided via Highway 1 (Cabrillo Highway) to the southwest, as well as Highway 17 to the east. Connecting roadways in the area include Empire Grade Road and Bonny Doon/Pine Flat Roads. Perimeter and internal gates on the main tract currently restrict access to the existing unpaved roads in the San Vicente Redwoods. Existing perimeter access points are located along the northern edge of the main tract off Empire Grade, the western edge of the main tract off Bonny Doon Road, and along the southern edge of the main tract that borders the BLM's Cotoni-Coast Dairies property. Vehicular access to the trail at the site of the Laguna tract would be via the existing parking area off Martin Road.

There are a variety of existing roads and trails on the San Vicente Redwoods property, including over 80 miles of double lane and single lane roads, a railroad line, tractor roads used for timber harvest operations, and narrow trails. Many of the roads were developed for historic timber and quarry operations, and some continue to provide access for ongoing timber operations, fire, utility access, private easements, and general property management. The primary road that extends from the north to the south of the property is the private Warrenella Road. Warrenella Road is used for timber harvest activities and serves as the sole access road for several private properties. While the Warrenella Road and many other existing roads are currently used and actively maintained, others are not currently passable due to overgrowth of vegetation and maintenance needs.

A utility road for existing high-tension electric transmission lines (operated and maintained by Pacific Gas and Electric Company) passes through the northern portion of the main tract (roughly parallel with Empire Grade). The main tract also contains a former quarry pit and a private inholding; however, the proposed parking area and trails would not occur at those locations. Otherwise, both the main and Laguna tract properties are undeveloped and provide opportunity for public access and conservation.

The areas where the proposed parking area and trails would occur include eight terrestrial habitat communities (madrone forest, tanoak forest, redwood forest, canyon live oak forest, California bay

forest, coast live oak woodland, Anderson's manzanita chaparral, and brittle leaf manzanita chaparral) and three aquatic habitat communities (seasonal wetlands, shrub-scrub wetlands, and streams.)

Elevations within the main tract range from approximately 500 to 2,500 above mean sea level. The main tract contains a number of east-west trending ridges extending from Empire Grade transitioning into a north-south trending ridge that dips down into the BLM's Cotoni-Coast Dairies at the southern end of the main tract. The largest creek on the main tract is San Vicente Creek, a perennial stream with its headwaters near Empire Grade. Upper watersheds for Scott Creek and Molina Creek also exist on the main tract. The Laguna tract has elevations that range from approximately 700 to 1,500 feet above mean sea level. Laguna Creek passes through the Laguna tract. There are also a number of ephemeral, intermittent, and perennial streams and drainages on the two properties that feed into these larger creeks.

The parking area for the proposed recreational trail system on the main tract would be located on the south side of Empire Grade Road, across the street from the Crest Ranch Christmas tree farm (Figure 2). The proposed parking area location is currently improved with an existing unpaved road with a gate at the entrance off Empire Grade and an existing unpaved trail. This area is currently forested with Coulter Pine, a tree species which was planted in the area for either revegetation or forest plantation purposes, but is not commonly occurring on the property or in the project vicinity. The parking area location is situated on a northwest facing hillside with an average slope of 10%. The soils at this location are well drained with moderate permeability and are considered as appropriate for storm water infiltration in vegetated basins. The runoff from the parking area location currently flows from east to west in undeveloped forested areas to a swale downslope, which eventually feeds into Big Creek located approximately 1.5 miles downstream of the parking area.

San Vicente Redwoods is surrounded by single-family residential, institutional, and recreational land uses. The following properties border San Vicente Redwoods:

- Ben Lomond Conservation Camp, a California Department of Corrections and Rehabilitation facility, to the north, on the same side of Empire Grade Road.
- The unincorporated residential communities of Bonny Doon (to the north and east) and Davenport (to the south).
- BLM Cotoni-Coast Dairies, a unit of the California Coastal National Monument to the south.
- Private residential property and timberland at various surrounding locations, including the Swanton Road area to the southwest.

San Vicente Redwoods is situated between inland and coastal areas, and public and private open space. Adjacent and nearby open space includes, but is not limited to, Big Basin Redwoods State Park (including Little Basin), Henry Cowell Redwoods State Park (Fall Creek Unit), San Lorenzo Valley Water District property (closed to the public), the CDFW's Bonny Doon Ecological Reserve, and the BLM's Cotoni-Coast Dairies property.

DETAILED PROJECT DESCRIPTION:

San Vicente Redwoods Public Access Plan

Overview and Purpose

The purchase of the San Vicente Redwoods by the Peninsula Open Space Trust (POST), Sempervirens Fund, Redwoods League (SRL), and the Land Trust of Santa Cruz County (LTSCC) (jointly referred to as the Conservation Partners) in December 2011 resulted in the combination of approximately 27,500 acres of contiguous protected land, as the San Vicente Redwoods fills a long-standing gap between numerous protected lands that surround it. The protection and management of San Vicente Redwoods has been undertaken by a collaboration of the Conservation Partners. In December 2014 a Conservation Easement was executed for the San Vicente Redwoods to preserve and protect in perpetuity the natural, ecological, habitat, scenic, open space, and forestry resources located on the property. POST and Sempervirens Fund are currently responsible for the protection and management of the property, the SRL is responsible for the monitoring and enforcement of the Conservation Easement, and the LTSCC would be responsible for implementing the proposed San Vicente Redwoods Public Access Plan as the Public Access Manager.

The purpose of the proposed San Vicente Redwoods Public Access Plan is to identify the short-and long-term vision and tools to initiate and maintain public access for at least 10 years. Following this time period, the proposed San Vicente Redwoods Public Access Plan may be revisited in accordance with the Conservation Easement (2014) due to changes in circumstances, including the possibility of a future change in land ownership. In the event of an ownership change, where there is a transfer fee title for the property to another entity, the parties to that transfer will reexamine the San Vicente Redwoods Public Access Plan and amend as appropriate. The proposed San Vicente Redwoods Public Access Plan would be used by the Conservation Partners and any other partners to guide the management of public access on the property.

Project Vision and Conservation Strategies

The Conservation Vision (established by the Conservation Partners in 2011) includes integrating preservation, restoration, and sustainable timber harvesting with research, education, and recreation. Providing access for research, education, and recreation is also a core component of the Conservation Vision and allowing for public access is a requirement of the Conservation Easement (2014) that protects the property.

The conservation strategies were informed in part by the planning process described below, which entailed mapping and analyzing various features of the site, including aquatic, marbled murrelet, and mountain lion habitat; climate resilience based on stream buffers and topographic shading; vegetation communities; geology, soils, and erosion sensitivity; and road density, usage, steepness, and hydrologic connectivity. Relative conservation values were then applied for each feature type to the 21 planning watershed units that were identified on the property. Based on the cumulative analysis, the planning watersheds were further grouped and delineated as Management Areas, listed below, to form the basis for the conservation strategies:

- **Preservation Reserve.** Two areas of the project site were delineated as Preservation Reserves, totaling about 900 acres. These areas would be managed to preserve and maintain existing old forest and other rare plant communities.

- **Restoration Reserve**. Three areas were delineated as Restoration Reserves, totaling about 4,000 acres. These areas would be managed to allow limited timber harvesting primarily for the restoration and enhancement of native ecosystem values.
- **Working Forest**. Two areas were delineated as Working Forest, totaling about 3,700 acres that are areas to be managed to emphasize Sustainable Forest Management.

The proposed San Vicente Redwoods Public Access Plan includes policies, design guidelines, construction protocols, trail maintenance guidelines, and rules and regulations, that have been carefully prepared to reduce and/or avoid impacts to the environment as a result of construction and operation of the proposed parking area and trails to the extent feasible. The proposed policies, guidelines, and construction protocols aim increase opportunities for pedestrian and bicycle access and connectivity; protect open space and cultural resources; and conserve natural resources. The proposed San Vicente Redwoods Public Access Plan policies also aim to avoid hazardous conditions and facilitate a healthy and safe environment for visitors to San Vicente Redwoods. In addition, the San Vicente Redwoods Public Access Plan policies ensure the proposed parking area and trails are compatible with neighboring land uses. Extensive rules and regulations would include, but are not limited to, restricting access to the designated trails and the parking area, enforcing compliance with allowed uses and prohibiting uses that are not allowed, restricting dog access to on-leash only designated trails and parking area, and limiting public access to daylight hours.

A comprehensive list of proposed policies, guidelines, and construction protocols, and rules and regulations is provided in the San Vicente Redwoods Public Access Plan (Attachment 2).

Planning Process and Alternatives

Following the purchase of the property in 2011, the Conservation Partners established a Conservation Vision (2011), Conservation Easement (2014), and the first Timber Harvest Plan (THP# 1-14-117 SCR) approved by CAL FIRE (2015). Prior to the development of the proposed Public Access Plan an extensive existing conditions analysis (including background and on-site research) was prepared, in coordination with related planning efforts, consultation with experts and regulatory agencies, and extensive public outreach.

The Conservation Partners Working Group comprised of a member of each partner provided guidance throughout the planning process at meetings held almost every week from 2013 to the present. The Working Group consulted the University of California Santa Cruz Puma Project to understand the areas of the property that support mountain lion denning, movement and foraging, and supplemented the University's data with game camera data managed by the current San Vicente Property Manager. Potential trail corridors and parking area locations were flagged on site by professional trail designers and builders; evaluated by the civil and environmental engineers for stability related to erosion and geotechnical considerations; and surveyed by biological and cultural resource experts. Through close coordination with technical experts, trail alignments were refined to minimize potential impacts to resources. Site visits were conducted with representatives from the County of Santa Cruz and CDFW. In addition, the project was presented to California Coastal Commission (CCC).

Public outreach for the project consisted of interviews and small meetings, stakeholder interviews, an online questionnaire, community meetings, and neighborhood outreach. The public was notified of the opportunity to participate through extensive media coverage of the topic, including newspaper articles, television news broadcasts, and news websites. Adjacent property owners and several government

agencies were contacted by phone or email. Throughout the planning process, the community was engaged through over 130 separate meetings and interviews with a cumulative attendance of over 1,600. Outreach efforts are summarized as follows:

- **Interviews and Small Meetings:** Interviews and small meetings with interested parties conducted by the LTSCC between 2013 and 2018. Interested parties included owners of adjacent lands, emergency service providers, water purveyors, utilities, law enforcement, and local community groups. Local experts and agencies were also consulted from the following fields: biology, geology, forestry, cultural resources, recreation, and education. Approximately 150 individuals and groups were identified and contacted. In total, such meetings were held with approximately 190 people.
- **Stakeholder Meetings:** Two stakeholder meetings were held for education and research interests, and representatives of recreational user groups. Attendees of the education meeting included representatives from Swanton Pacific Ranch and University of California, Santa Cruz. Attendees of the recreational meeting included hikers, mountain bikers, equestrians, dog-walkers, nature interpreters, representatives from the Sierra Club, the Mountain Bikers of Santa Cruz, BLM, the Santa Cruz Bird Club, the 8 Shields Institute, and the Fungus Federation.
- **Online Engagement:** An online questionnaire was hosted from November 2013 through April 2014 to seek public input from neighbors, residents, agency staff and others. Additionally, in May 2014, questionnaires were also shared with a local non-profit to interface with the local Spanish speaking community. In total 2,326 people filled out the questionnaire.
- **Community Meetings:** A community meeting was held in March 2014 with over 300 people who shared their views on public access. An additional community meeting was held in September 2014 with approximately 150 attendees to provide input on the preliminary draft San Vicente Redwoods Public Access Plan regarding preferences, priorities and concerns.
- **Neighborhood Outreach:** Neighborhood outreach included presentations at four meetings of the Rural Bonny Doon Association and more than 20 smaller meetings, including five meetings in the spring of 2018 attended by over 120 people in total.

Alternatives with respect to the location of the parking area, trailhead access points, the general location and extent of trails, and the types of allowed uses were considered during the planning process. The following provides a description of these alternatives and the basis for the selection of the project:

- **Parking Areas:** All locations considered for a parking area were on Empire Grade, which is the only public road with access to the portion of the property planned to be open to the public. Alternative parking area sites were considered at Warrenella Road, near the CDCR's Ben Lomond Conservation Camp, and near the Crest Ranch Christmas Tree Farm. Both of these sites have existing entrances from Empire Grade, and gates, fire roads and small clearings that could support a parking area. Parking areas were evaluated at these locations to be at least 300 feet from occupied residences to increase privacy for neighbors and minimize aesthetic impacts.
    - **Warrenella Road Parking Area Alternative:** The entrance to this location is an existing fire road located at approximately 11297 Empire Grade. The parking area would be set back approximately 50 to 350 feet from Empire Grade. This parking area alternative is dominated by large native trees, the removal of several of which would be required for construction. Warrenella Road is used to access Empire Grade by the residents of

inholdings, timber trucks and emergency vehicles. These uses would conflict with use by recreational visitors at this site. There are no residences within the 300-foot buffer described above. The closest residences include approximately 15 homes within 1,500 feet of the parking area at this location. A curve on Empire Grade is located approximately 300 feet south of this location.

- **Parking Area Alternative near Ben Lomond Conservation Camp:** The entrance to this location is an existing fire road located at approximately 13435 Empire Grade. The parking area would be set back approximately 50 to 150 feet from Empire Grade. This parking area predominantly hosts native shrubs such as ceanothus and manzanita. The area around this alternative location is planned to remain closed to the public. Fire roads in this area are used by the Ben Lomond Conservation Camp for training exercises. This alternative location would conflict with the routine operations of this CDCR facility. There are no residences within the 300-foot buffer described above. The closest residences include approximately five single-family homes within 1,500 feet of the parking area at this location. A curve on Empire Grade is located approximately 350 feet north of this location.
- **Parking Area Alternative near Crest Ranch Christmas Tree Farm:** The entrance to this location is an existing fire road located at approximately 11851 Empire Grade. The parking area would be set back 150 to 350 feet from Empire Grade. This parking area alternative location hosts a large stand of non-native pines. The fire roads in this area are infrequently used. Selection of this area would cluster development near other developed areas, such as the Crest Ranch Christmas Tree Farm, while maintaining the 300-foot setback described above. The closest residences include approximately 50 single-family homes with the closest being approximately 950 feet from the parking area at this location. Empire Grade is straight for greater than 700 feet to the north and south of this location to allow for safe vehicular turning movements.

- **Trailhead Access Points:** An access point on Bonny Doon Road and two trailhead access points from Cotoni-Coast Dairies were considered, one in the northwest portion of this area and one is near Warrenella Road.
  - **Bonny Doon Road Trailhead Alternative:** This alternative trailhead access point would enter at a portion of the San Vicente Redwoods that is planned to remain closed to the public.
  - **Warrenella Road Cotoni-Coast Dairies Trailhead Alternative:** This alternative trailhead access point is on the Cotoni-Coast Dairies and would conflict with other uses of Warrenella Road including residential traffic, timber hauling, and emergency vehicles.
  - **Northwest Cotoni-Coast Dairies Trailhead Alternative:** This trailhead access point alternative is located on the northwest portion of Cotoni-Coast Dairies and would allow trail connections between the and portions of San Vicente Redwoods that are planned to be opened to the public.
- **Location and Extent of Trails:** A range of options were considered for the general trail locations as well as areas that should be opened and closed to public. These included large loop trails, use of existing fire roads as trails, use of the Warrenella Road, and a combination of trails and existing fire roads that contained access to a portion of the property while still allowing a variety of trail experiences.

- **Large Loop Trails Alternative:** Large loop trails were considered that could have spanned large portions of the property. These trails would have traversed steep and unstable terrain and taken visitors to remote portions of the property where emergency services would be difficult to provide. Some of these areas are prime habitat for wildlife, supporting sensitive life stages such as breeding and denning, based on interviews and data provided by the University of Santa Cruz Puma Project. Minimizing visitor entry into these areas to protect the conservation values of the property associated with biodiversity and wildlife habitat is a fundamental part of the Conservation Partner's conservation strategies for the San Vicente Redwoods.
- **Existing Fire Road Trails Alternative:** Some existing fire roads were found to be suitable for use as trails, but most were found to be unsuitable. The existing fire roads are typically too steep and would require extensive winterization. They are not designed for year-round use, and such use would result in excessive erosion. Additionally, many fire roads would direct visitors into areas that support sensitive wildlife life stages such as breeding and denning.
- **Warrenella Road Trail Alternative:** The Warrenella Road was briefly considered as a trail. However, this road is used by the residents of inholdings, timber trucks, and emergency vehicles. This road is deeply incised in many sections. Extensive portions of it are poorly drained, and routine closures are necessary to prevent excessive erosion. It is unsuitable for use by recreational visitors.
- **Combination of New Trails and Existing Fire Road Trails Alternative:** This option with a combination of new trails and existing fire roads that are located near, but not on the Warrenella Road, and other major fire roads would allow for sustainable trails to be established, through both new construction and renovation of the fire roads to be used as trails. Proximity to the Warrenella and other major fire roads enables improved access for emergency response, compared to the large loop trail option. This combination approach also directs visitors into areas of the property that are less used for sensitive wildlife life stages.

- **Allowed uses:** Options for allowed uses were considered by eliminating uses that were already prohibited and by determining what would allow people to connect with nature in a manner that accomplishes their personal preferences, so long as their activities do not compromise environmental quality or the experience of others. Accordingly, activities prohibited by the 2014 Conservation Easement (e.g., motor vehicles) and by State regulations (e.g., fishing) were eliminated. Allowed uses considered the following:
  - **Hiking, Bike Riding, Horseback Riding, and Dog Walking:** These uses result in similar effects in regard to trail erosion, in that trail design and maintenance have a greater effect on erosion than the type of use. These four uses also have been found to have similar impacts on wildlife. Based on consultation with experts at the University of California Santa Cruz Puma Project, dog walking is understood to deter use of the area by medium and large mammals for sensitive life stage activities such as breeding and denning. However, during the planning process it was reported from many hikers that they would feel unsafe hiking without their dogs, and from nearby residents who expressed that dog walking would be a primary activity on the property. It is recognized

that hiking, bike riding, horseback riding and dog walking on the same trails sometimes results in conflict between visitors.

- **Back Country Style Camping**: This use requires a higher level of management than other recreational uses. Relatively few locations on the property have the combination of a level area with good access by roads for servicing the area. Those that do are in parts of the property closed to public access for safety, forest management, and wildlife habitat.

On the basis of these alternatives, the proposal includes a parking area near the Crest Ranch Christmas Tree Farm, a trailhead access point in the northwest portion of the Cotoni-Coast Dairies, a combination of new trails and existing fire roads located near major fire roads, and allows hiking, bike riding, horseback riding and dog walking (on leash). These sites were selected due to the distance to existing residences, compatibility with adjacent land uses, avoidance of impacts to plants and wildlife, and reduced potential for accelerated erosion. The allowed uses were assigned to the various trails so visitors whose experience is impacted by a particular use can avoid visitors engaging in that use. Dog walking trails were restricted to the trails adjacent to Empire Grade, where transportation, residential, agricultural, commercial, and government use is likely to already deter use of this area by wildlife for sensitive life stages.

Parking Area and Trails

With the exception of trails that are designated for public access and posted as open, all areas of the property would be closed to public access unless a special permit is issued by the Property Manager. The proposed parking area and trails would occur in two of the three management zones. These zones and the implications to management, maintenance, and operations are identified below.

- **Parking Area (4.7 acres):** This zone would be limited to the parking area vicinity and would receive the highest level of concentrated use. Regular management and maintenance would be provided in this area.
- **Public Access Area (460 acres):** This zone would include a 100-foot-wide corridor centered on the trail, with 50 feet on either side, for routine access. Ongoing maintenance and management would be provided to ensure resource protection, including monitoring to ensure that recreational use is limited to designated trail alignments.
- **Closed Area:** Most of the property (approximately 94%) would be closed to public access. As part of the research and education component of the proposed San Vicente Redwoods Public Access Plan, these uses would be permitted throughout the property on a case-by-case basis. For this zone, the Management Team would focus management efforts on approving appropriate research and education uses and preventing inappropriate access and addressing any trespass.

The use of the proposed parking area and trails would be limited to daylight hours, with public access facilities generally opening a half hour after sunrise and closing a half hour before sunset. The construction and operation of the proposed parking area and trails would be implemented in multiple phases. The following describes the project features and phasing.

Parking Area

The proposed 4.7-acre parking area would include primary access points off of Empire Grade, internal roads for access and circulation, parking areas for vehicles and bicycles, and other access features described below (see Figure 3).

Entry Features

Two access points to the parking area are proposed, an entrance and an exit. Each would include a 16-foot wide locked gate that would be opened and closed by the Public Access Manager or their designee. The entrance to the parking area would be constructed with natural materials that are visible and also blend in with the surrounding environment, such as stone, concrete, metal, and/or wood. A conceptual simulation is included (Figure 4) to provide a general idea of the view from Empire Grade. Signage at the entrance would be visible for approaching vehicles coming in both directions on Empire Grade Road and to discourage roadside parking outside of the parking area. Another access point would be a future connection to an anticipated, but not formally planned, trail network on Cotoni-Coast Dairies.

Parking Area Features

Access features associated with the parking area would include signage, benches, trash receptacles, dog facilities, restrooms, safety and security features, and temporary construction trailer. All parking area features would be constructed with durable and framing/support structures made of natural materials, where possible. These features are described as follows:

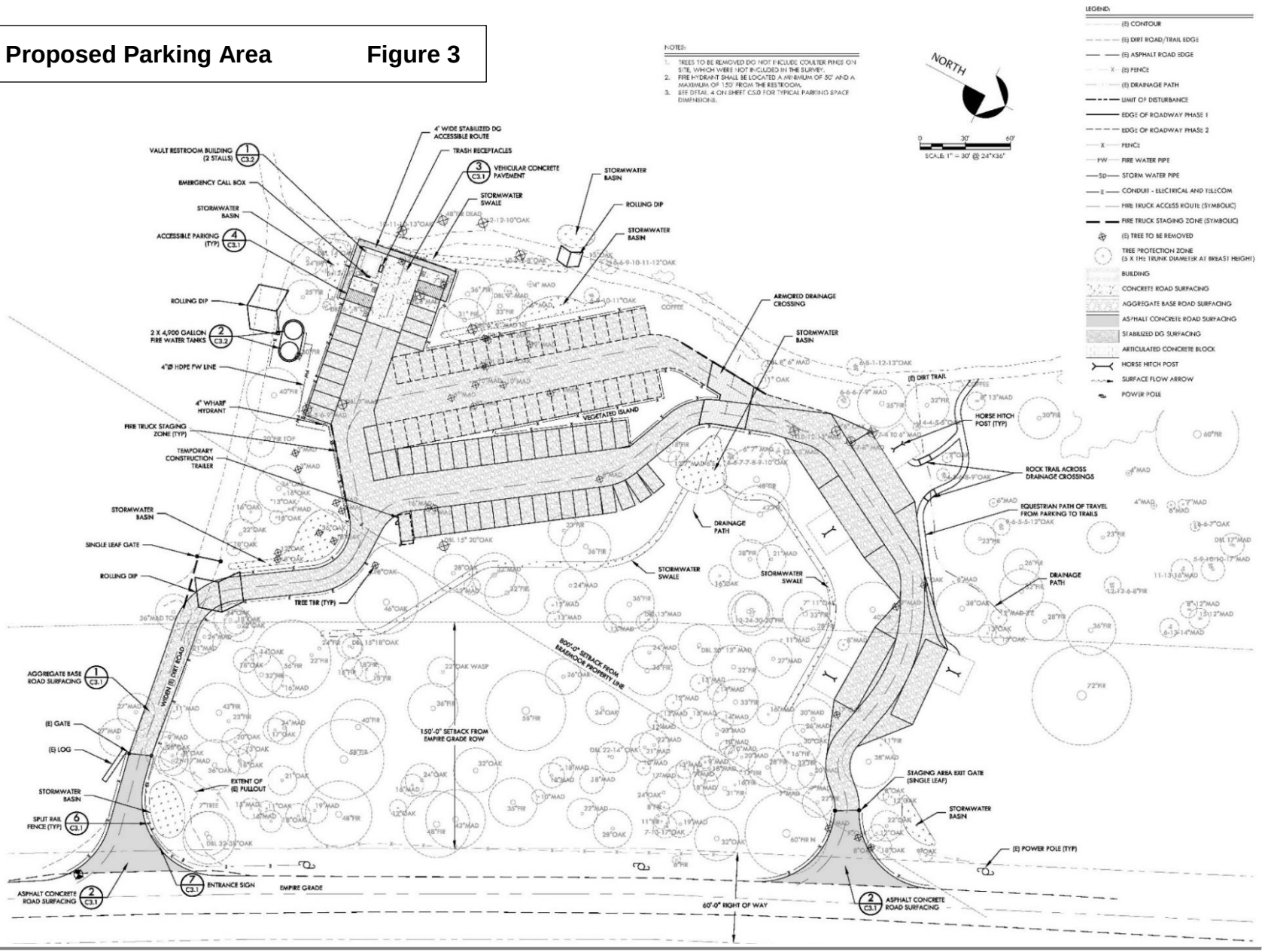
- **Signage:** Clear signage would be installed and maintained at the parking area for wayfinding, and education and information about the natural resources, and to convey the trail rules, allowed uses, trail etiquette, safety features, and hours of operation. Signage would be on posts, kiosks, or bulletin boards.
- **Site Furnishings:** Up to two picnic tables and four benches would be provided at the parking area with a visual buffer between the parking area and restroom building. Tables would be located outside the dripline of any redwood trees. Clear signage would be posted near the picnic area to indicate that all trash is required to be packed out or put in the trash receptacle.
- **Trash Receptacles:** Up to four trash and recycling receptacles with an approximate 110-gallon capacity to hold two standard 55 gallon recycle-type bags would be located at the parking area. Trash receptacles would be ADA-compliant with a wildlife-proof internal single point self-latching system on the service hatch. Trash receptacles would be welded with 14-gauge construction and mounted on concrete pads at the restroom buildings.
- **Dog-courtesy stations:** A dog-courtesy station with bags for waste would be mounted on the restroom building or the information kiosk.
- **Restroom Building:** A single prefabricated restroom building with two vault toilets would be installed on a building pad approximately 15 feet by 15 feet. Vents would be located in the prevailing wind direction. No potable water or associated infrastructure is proposed.

  Safety Features: For fire protection services, filled from a water truck through an access manway and a 4-inch wharf hydrant would be installed. The fire hydrant would be located a minimum 50 feet and a maximum 150 feet from the restroom building. The water tanks would be

mounted on an 8-inch prepared and compacted subgrade. Circulation design within the parking area would be constructed to meet all emergency vehicle turning radii standards and clear signage would mark these locations. Cameras and a standard emergency call box would be installed and routinely monitored by the Property Manager. Cameras would be installed at various locations and the emergency call box would be mounted on the restroom building. The single-speaker emergency call box would have a water tight enclosure and be vandal resistant.

- **Temporary Construction Trailer:** A construction trailer that would be sized to fit within a standard-vehicular parking space (18 feet by 9 feet) would be located at the parking area for use as staff offices and equipment storage during the construction phase. Electricity would be wired to the trailer by a certified electrician.

Proposed Parking Area **Figure 3**



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Conceptual Entry Features Figure 4

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Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Roads and Parking

The proposed roads and parking would maximize permeable surfaces and shade, minimize vegetation disturbance, and meet ADA standards at the trailhead. The two access points would form a loop driveway and link the parking area features, which are set back from Empire Grade. The circulation and parking would be developed over two phases to provide sufficient parking as the trail system is expanded over time. The first phase would include parking for up to 44 standard vehicles, four spaces for horse trailers, and two ADA-compliant spaces. The second phase would include up to 40 additional standard-vehicle spaces. The proposed parking area would meet the accessibility requirements of the United States Access Board's Final Guidelines for Outdoor Developed Areas (ODA). Bicycle parking at the parking area would be galvanized steel U-racks, looped-racks, or racks of a similar design, with a metal finish and, if necessary, the racks would be painted with neutral tones. No overnight parking would be allowed.

The parking area roads and parking spaces would be primarily surfaced with compacted aggregate base. The ODA-compliant parking and the restroom building pad would be surfaced with concrete. The ODA-compliant "paths of travel" would be surfaced with stabilized decomposed granite. The existing unpaved access points off Empire Grade would be surfaced with asphalt. The existing unpaved road would be re-graded and filled, to properly route stormwater drainage. The elevation of the existing road would be increased, and the existing trail would be graded in order to meet the elevation of the restroom building. Both the existing road and existing trail would have a finished surfaced of compacted native soil, similar to their current condition. As shown in Table 1, the total impervious area would be 30,259 square feet.

Table 1: Parking Area Impervious Use by Use and Type

Use	Area (sf)	Surface Type/Material	Weight	Impervious Area (sf)
Restroom Building	171	Roof	100%	171
ODA Parking and Driving Aisle	2,243	Concrete	100%	2,243
Fire Storage Water Tanks	226	Roof	100%	226
Accessible Access Trail*	489	Stabilized Decomposed Granite	100%	489
Armored Drainage Crossing	1,003	Articulated Concrete Mat	100%	1,003
Roads and Parking Areas	44,196	Compacted Aggregate Base	50%**	22,098
Entrance and Exit	4,029	Asphalt Concrete	100%	4,029
Total Impervious Area Created by the Project				**30,259**

*United States Access Board's Final Guidelines for Outdoor Developed Areas (ODA)
**The compacted aggregate base surfacing is assigned 50% because it is considered a "semi-pervious" material.
Source: Fall Creek Engineering, Inc., Drainage Analysis. San Vicente Redwoods Staging Area, Assessor's Parcel Number (APN) 080-011-42, Empire Grade, Santa Cruz County, California, August 2017.

The proposed parking area would include seven vegetated basins to manage both concentrated storm water runoff from the proposed impervious areas and runoff from areas with existing drainage issues.

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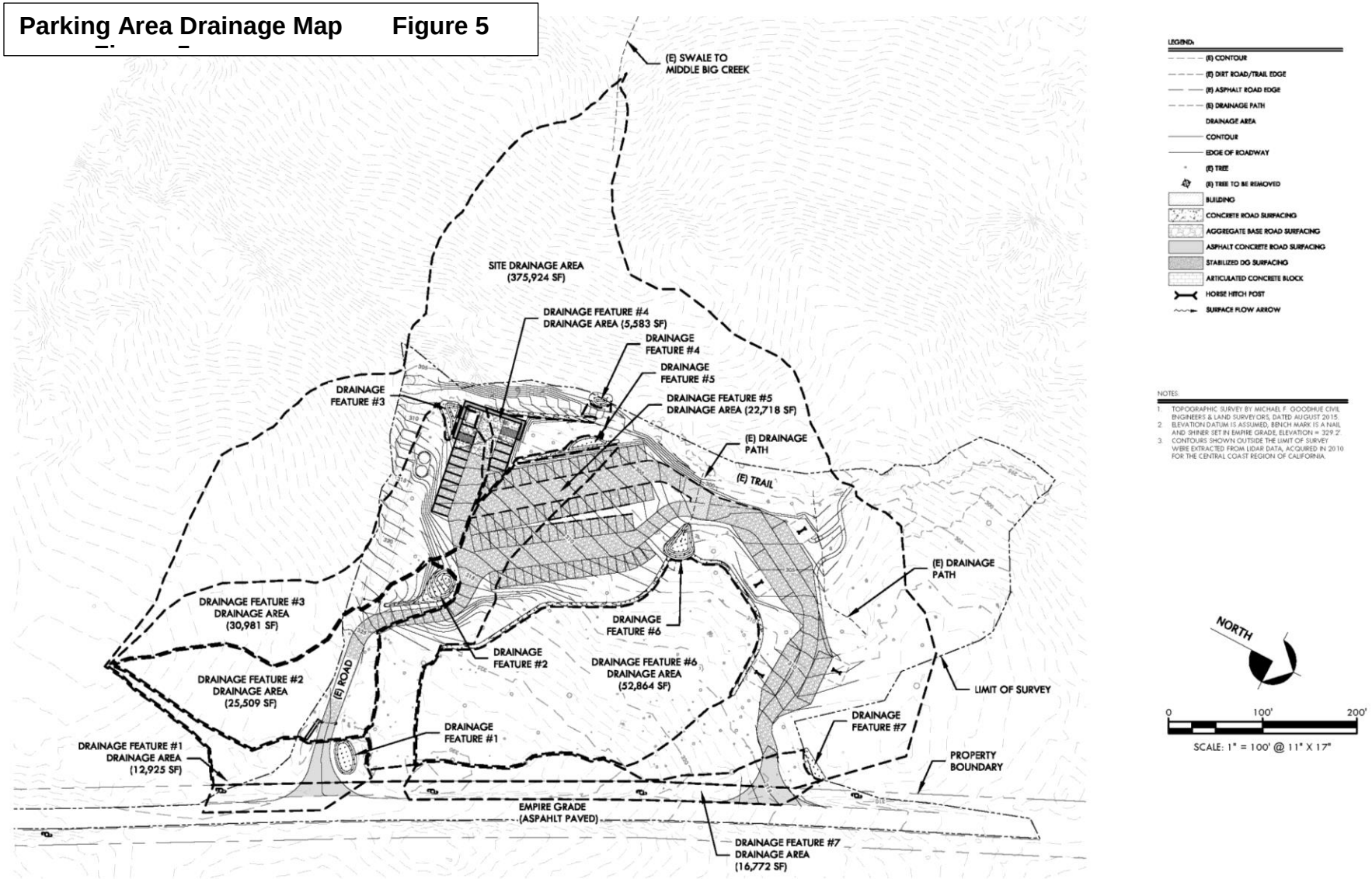
The seven vegetated basins are labeled storm water basins on Figure 3 and Drainage Features #1 through #7 on Figure 5 and described as follows:

- **Feature #1** would collect and manage run-on to the site from existing Empire Grade, which is paved with asphalt concrete, as well as run-off from the adjacent entrance to the parking area, which is also paved with asphalt concrete.
- **Feature #2** would collect and manage runoff from the top of the existing entrance road to the parking area in order to minimize storm water runoff down the existing road, which is currently a drainage issue on the parking area.
- **Feature #3** would collect and manage runoff from the adjacent concrete paved accessible parking area and roof runoff from the restroom building.
- **Feature #4** would collect and manage runoff from the concrete paved accessible parking areas.
- **Feature #5** would collect and manage runoff from a portion of the main aggregate base paved parking area.
- **Feature #6** would collect and manage run-on to the site from undeveloped areas. An existing drainage path crosses Drainage Feature #6, and the intention of this vegetated basin is to minimize concentrated flow over the parking area circulation road. In addition to the vegetated basin, an armored drainage crossing would be installed on the road where the drainage path leaves from the vegetated basin.
- **Feature #7** would collect and manage run-off from the adjacent exit from the site, which is paved with asphalt concrete.

Other areas of the parking area that are surfaced by semi-pervious surfaces, such as aggregate base road surfacing, have been designed to sheetflow to vegetated areas where natural soil infiltration would occur. Additionally, any overflow from the proposed vegetated basins will sheetflow to natural, vegetated areas.

Parking Area Drainage Map Figure 5



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Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Trails

At full build-out, the proposed trail network would include approximately 38 miles of single-use, dual-use, and multi-use trails. The trail system allows for a number of loop options on the upper are of the Main tract. The trail system design for the Main tract would also allow for a through connection from Empire Grade to the Cotoni-Coast Dairies property when the trail system for that property is completed. The Laguna tract improvements would be to an existing trail and is limited to minor reroutes to reduce the potential for erosion from the existing trail. The Laguna tract trail would be accessible only through existing trails on the CDFW Bonny Doon Ecological Reserve, which are accessed at the existing CDFW parking area on Martin Road. Trail planning for the Laguna tract has been conducted in coordination with CDFW and no mountain biking would be permitted on this section of trail. Conceptual trail alignments that indicate appropriate trail corridors where trails could be located are shown on Figure 2. The exact alignment may vary as necessary to address field conditions and meet the trail design guidelines of the San Vicente Redwoods Public Access Plan. The following describes the proposed types of trails and the permitted uses, creek and drainage crossings, trail design guidelines, and other trail features that are proposed as part of this project.

Trail Type and Uses

Trail use designations are subject to change in response to trail conditions, feedback on visitor experiences, and adaptive management over the lifetime of the project. Conceptual trail alignments are described below.

- **Single-Use Trails:** Single-use trails would be limited to the 1.5-mile hiking-only trail on the Laguna Tract (no mountain biking would be permitted on this section of trail). A short 0.2-mile trail horse-only connection would be on the main tract.
- **Dual-Use Trails:** Dual-use trails allow hiking and either biking or equestrian uses. There would be 19.1 miles of dual use trails that allow hiking and biking, with connections from the Empire Grade to the multi-use trail in the southern portion of the property. Loop hiking and biking trails would be concentrated in the northern portion of the property. The 11.9 miles of dual-use trails that allow hiking and equestrian would comprise most of the through-trail experience for equestrian uses, with connections to multi-use trails to the north and south part of the site.
- **Multi-Use Trails:** There would be 5.4 miles of multi-use trails that allow hiking, biking, and equestrian use. These trail segments would be located in constrained areas where separate use trails are less feasible, including the southern end of the through-trail and a short segment in the central area of the through-trail. On-leash dogs are limited to 2.5 miles of the multi-use trails. These trails would be located primarily along an existing frontage road that parallels Empire Grade, and is the only trail where dogs are allowed on the property.

Trail mileage at buildout is summarized in Table 2 according to potential designated uses. As shown in Table 2, of the proposed 38 miles of trails, approximately 30% or 12 miles would be on existing timber harvest roads and 26 miles would be new trails. Trails within the Laguna Tract would be primarily on existing trails and within existing trail alignments, with improvements to the existing trail conditions where needed.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Table 2: Trail Network Summary at Buildout

Initial Trail Use*	Located on Existing Road/Trails (Miles)	New Construction* (Miles)	Total Trails at Buildout (Miles)
Main tract			
Horse	0	0.2	0.2
Hike and Horse	5.0	6.8	11.8
Hike and Bike	2	17.1	19.1
Hike, Bike, Horse	2.4	0.5	2.9
Hike, Bike, Horse, Dog	1.3	1.2	2.5
Subtotal (Main Property)	*10.7*	*25.8*	*36.5*
Laguna Tract			
Hike	1.3	0.2	1.5
Subtotal (Laguna Tract)	*1.3*	*0.2*	*1.5*
Total	**12**	**26**	**38**

*Trail mileage estimates for newly constructed trails is measured based on 100-foot corridor study areas using GIS and increased by 13% to allow for sinuosity, grade changes, and other anticipated variations in trail alignment.

Trail Drainage and Creek Crossings

The conceptual trail network would include multiple drainage, creek, and swale crossings. Each potential crossing was evaluated during field review of the proposed trail network by Fall Creek Engineering, Inc. During the field evaluation, geometric and qualitative data was collected for each existing crossing and a preliminary determination was made for the proposed crossing improvement.

The project would include armored crossings, puncheons, and bridges. In addition, in some cases improvements to existing culverts on the project site are proposed to improve the culvert condition. These crossings are described as follows:

- **Armored Crossings:** These crossings are proposed for small ephemeral drainages that are generally classified as non-jurisdictional crossings. These crossings have poorly defined bed and bank, and crossings can be made without steep trail sections along the approach and departure to the crossing. An armored crossing is a minimally invasive improvement that will reduce erosion in the drainage from trail use. In addition, armored crossings are proposed for some crossings along existing roads and trails despite the crossing classified as jurisdictional. The decision for armored crossings for these situations was made to avoid any new impacts that would be created by a new trail off of the road where a pedestrian puncheon or bridge could be built across the drainage and to eliminate impacts that would result if a large traffic rated bridge was constructed to fully span the crossing.
- **Puncheons and Bridges:** Puncheons and bridges are proposed for all new stream crossings over sensitive habitat. Puncheons are small bridges without railings. These crossings would be

located over intermittent and perennial streams that are generally classified as jurisdictional crossings. These crossings would have defined bed and bank, where an armored crossing would result in steep trail slopes along the crossing approach and departure. The puncheons and bridges would be sized to span from top of bank to top of bank[1] at a minimum. Railings are required on bridge structures with a height above ground exceeding 30 inches. To allow for variation in the height of bridge structures during construction, any bridge structure with a height greater than 24 inches based on the collected field data is proposed to be a bridge. Bridge structures with a height less than 24 inches are proposed as puncheons.

- **Culverts:** Culverts are tunnels that carry a stream or open drain under a road or railroad. Existing culverts were evaluated based on their condition and capacity. Culverts with adequate condition and capacity would remain as is. Culverts with adequate condition but inadequate capacity would remain as is with road armor proposed to manage overflow from the culvert. Additionally, improvements to culvert inlets and outlets are proposed to minimize erosion at the inlet and outlet of the culvert. Culverts with adequate capacity, but inadequate condition would have proposed improvements to the culvert structure itself to allow for continued use. In some cases, culverts are not serving their intended purpose and are recommended for removal and replacement with an armored road crossing.

Of the proposed armored crossings, some are classified as "wait and watch" crossings and would be improved in the future if necessary after monitoring. There are 21 existing culverts, 5 of which are recommended for removal and replacement with an armored crossing, 9 have other improvements, and 7 would have no improvement. The 9 culverts with improvements would include removing chutes after culverts, installing downstream armor, installing a headwall at the culvert inlet, and replacing a section of broken pipe. In addition to these crossings, the project would include one crossing with no crossing improvement where trail users would cross using an existing rock hop.

The proposed drainage and creek crossings were designed to be compliant with the Santa Cruz County Design Criteria, which requires that all drainage improvements are sized to convey a minimum 10-year storm. In addition, drainage improvements are required to be sized to convey flood overflows based on the drainage area size and the type of improvement. For drainage areas less than 100 acres, a minimum return period design flow of 25 years is required for conveyance of the flood overflow. For bridge structures a return period design flow of 100 years for the flood overflow is required. Under the project, all but three of proposed crossings would have drainage areas that are less than 100 acres. Of these three crossings, two crossings would not have any proposed improvements because one is a recently replaced culvert and the other is a culvert was replaced under the current Timber Harvest Plan (THP). The third proposed crossing would be improved with a bridge structure and would be designed to accommodate the flow associated with the100-year storm. All crossings designed to convey the flow associated with the 100-year storm. The proposed bridge abutments would be located outside of the top of bank for the drainages and puncheons are designed to lift off their foundations during large flows, while begin

[1] Top of bank designates the first major change in the slope of the incline from the ordinary high-water level of a water body.

tethered for retrieval and replacement after the storm. In all cases the crossings would safely convey the flow associated 100-year storm event for that drainage area.

Trail Design Guidelines

The project includes trail design guidelines that are intended to facilitate the design and construction of trails. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed.

The trail design guidelines are organized based on construction-type rather than trail type: (1) roads to be maintained for vehicles and used as trails, (2) roads to be decommissioned and converted into trails, and (3) trails to be built along completely new alignments. While the San Vicente Redwoods Public Access Plan includes a robust and detailed set of design guidelines, those described in this Initial Study focus on the guidelines designed to avoid environmental impacts. These are described as follows:

- **Roads to be Maintained for Vehicles and used as Trails:** The project would upgrade existing timber harvest roads to minimize erosion and extend the life of the trails while avoiding disturbance of the surrounding landscape. Signage and design would depend on whether the road would be used for regular, intermittent, or emergencies only.
- **Roads to be Decommissioned and Converted into Trails:** The historic railroad grade, which also served as a road historically, would be converted to use as a trail. Most of this landform is stable and would not be regraded. In these segments, the proposed trail would be installed on the inboard edge of the road. Existing stream crossings at these locations would be fully excavated during road-to-trail conversions and may be narrowed and upgraded for trail use. As the road approaches the crossing, the trail alignment would meander toward the inboard edge of the road to intersect with the stream on contour. Appropriate crossing structure would be installed at stream crossings; refer to discussion of stream crossings for new trails (above) for preferred crossings. To facilitate storm water management, the trail will occasionally meander across the retired road bed to create grade reversals that outlet to stable slopes away from streams. To facilitate storm water management, the trail would occasionally meander across the retired road bed to create grade reversals that outlet to stable slopes away from streams.
- **New Trails:** New routes would be created when existing routes are not able to provide desired connectivity or have drainage issues or other problems that make trail sustainability infeasible. New trails would conform to the natural terrain, minimize erosion and fall-line orientation, avoid the removal of trees larger than 12 inches in diameter at breast height (DBH) and damage to roots, and avoid active unstable and other hazardous areas, sensitive plant and animal habitats, archaeological resources, steep sideslopes, and unstable watercourse crossings. New trails would have a grade no steeper than half the grade of the native hillside and less than 15% except for sections shorter than 50 feet. New trails would avoid watercourse crossings where channel gradient is steep, as well as at deeply entrenched streams with potential unstable streamside slopes. Routes would generally be located such that drainage areas are crossed high

in their watershed locations where streams are less defined in order to avoid stream disturbance.

Trail dimensions would be determined based on the type or use of trail as shown on Table 3.

Table 3: Trail Dimensions by Use Type*

Trail Type	Tread Width	Vegetation Clearance	Maximum Grade
Accessible Trails	Constructed Width: 5 feet + Maintained Width: 5 feet +	2 feet horizontal; 10 feet vertical	<5% (ADA)** 10% (ODA)***
Multi-Use Trails	Constructed Width: 5 feet+ Maintained Width: 2 to 5 feet +	1-foot horizontal; 10 feet vertical	15% for any extended section
Equestrian Hiking Trails	Constructed Width: 2 to 5 feet Maintained Width: 2 to 5 feet	1-foot horizontal; 10 feet vertical	15% for any extended section
Mountain Biking Hiking Trails	Constructed Width: 2 to 4 feet Maintained Width: 2 to 4 feet	1-foot horizontal; 10 feet vertical	15% for any extended section

*Where trails utilize roads that are to be maintained for vehicle use, dimensions will be dictated by vehicular requirements.
**Americans with Disabilities Act (ADA)
*** United States Access Board Final Guidelines for Outdoor Developed Areas (ODA)

Other Trail Features

Other access features would include gates and fencing for security and safety, picnic areas, informal and semi-formal gathering areas, including up to 10 overlooks, plantings, signage, and other site furnishings. Limited site furnishings may include benches along the trail network and at scenic vistas or other destinations, as well as picnic tables in designated areas. These features are described as follows:

- **Security Gates and Fencing:** Gates and/or appropriate signage would be installed at certain roads and trails to allow for areas/trails to be closed off to the public when needed. Gates would be designed for utility and resistant to vandalism, to the extent feasible. All gates and bollards would be made of durable materials, such as metal, with a natural color finish except where safety marking (e.g., yellow color) is required. Fencing would be provided at entrances to the property and where necessary to restrict access. Three-strand wire, split-rail fencing, or other low, rustic fencing constructed of natural materials and designed to ensure permeability for local wildlife, is preferred when the purpose is to visually communicate restrictions where security concerns exist. However, chainlink fence and guardrails would be used when necessary to protect resources and ensure safety, but without impeding wildlife movement.
- **Picnic Areas:** The proposed picnic areas would include one or two tables near the parking area, yet have some visual buffer from the parking area. Picnic tables and benches would be located

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

outside of the dripline of redwood trees. Picnic areas would either include wildlife-proof trash receptacles or clear signage stating that trash must be packed out.

- **Informal and Semi-Formal Gathering Areas:** The proposed informal gathering areas do not require tree removal and/or vegetation clearing. The proposed gathering areas would be up to 20 feet by 40 feet. Gathering spaces would be developed where regular and/or on-going use is anticipated and supported by the Public Access Manager and its partners. As part of the research and education access, some informal gathering spaces for occasional use for certain education projects and programs could be located in closed areas outside of the 460-acre area of the property where the trails would be located. Vegetation would be maintained for views and seating at up to 10 overlooks. Maintenance may include removal of trees and shrubs less than 12 inches in diameter. An overlook may be up to 10 feet by 20 feet. These spaces would be considered on a case-by-case basis depending on the specific project and the number of individuals involved. Elements within semi-formal gathering areas should be limited to seating, preferably constructed with onsite materials such as fallen logs.
- **Plantings:** All new planting on the property would be native, regionally appropriate, and consistent with applicable regulations. Any cut surfaces or fill would be planted with native groundcovers.
- **Signage:** In addition to the signage at the parking area, clear signage would be installed and maintained at property boundaries and on all trails that include allowable uses, proper trail etiquette, and wayfinding. Trailhead signage would include length, surface type, typical and minimum trail width, and typical and minimum running and cross slopes. Interpretative and educational signage would communicate rules while also fostering a stewardship ethic. Trail closures would also be identified through clear onsite signage and gates, if warranted. Signage would be durable and framing/support structures would be made of natural materials, where possible.
- **Other Site Furnishings:** In addition to the site furnishings located at the parking area, rest stops with benches would be strategically located along trails to emphasize scenic views, encourage a diversity of experiences, and provide shade and other pedestrian comforts. Site furnishings would be located outside of the dripline of redwood trees. As true for all park features, site furnishings would be made of durable materials, such as concrete, metal, wood, or locally sourced stone, and would have natural or neutral colored finishes. For example, cut log stools for gathering areas.

Construction and Operation Phasing

The proposed San Vicente Redwoods Public Access Plan would be implemented in three phases as shown on Figure 2. For the purposes of this environmental analysis construction is anticipated to occur over limited time-periods throughout an approximately 9-year period at various locations on the staging and public access areas (i.e., approximately 460-acre area). However, adjustments may be required based on future unknown conditions such as available funding, contributions of partner organizations, opportunities for creating regional connections, and changes in ownership and management. The three phases of implementation identified for San Vicente Redwoods are summarized in Table 4 and further described below.

Table 4: Construction and Operation Phasing

Phase	Estimated Timeline for Phase Initiation	Located on Existing Road/Trails (Miles)	New Construction (Miles)	Total Trails (Miles)
Phase 1	Year 1, parking area and trails available at opening	2.6*	7.3**	9.9
Phase 2	Year 3, 4 or 5, assuming success in Phase 2	1	8.3	9.3
Phase 3	Year 5, 6 or 7, assuming success in Phase 3 and completion of connecting trails at the Cotoni-Coast Dairies	8.4	8.1	16.5
To Be Determined	To be determined	0	2.3	2.3
Total Trails at Buildout (Miles)		**12**	**26**	**38**

*Includes 1.3 miles on the main tract and 1.3 miles on the Laguna Tract.
**Includes 7.1 miles on the main tract and 0.2 miles on the Laguna Tract.

Phase 1

The first phase would provide the baseline level of public access, which would include the parking area and 8.4 miles of trails on the main tract. The proposed parking area would include two gated access points off of Empire Grade and an internal loop road, parking for up to 50 standard vehicles, two spaces for horse trailers and two ADA-compliant parking spaces, seven vegetated basins, fire storage water tanks, restroom building, and other features (e.g., benches, signage, trash receptacles). This parking area and this section of the proposed trail network is intended to be complete prior to the opening of the property for public access and is envisioned to provide visitors the opportunity to recreate on the property for at least two hours if bicycling and four hours if hiking. Phase 1 would also include the opening of a 1.5-mile trail within the Laguna Tract for hiking-only use.

Phase 2

Phase 2 would include up to 8.3 miles of new trails and 1 mile of improved existing road. To accommodate additional visitors, the second phase would include up to 40 additional standard-vehicle parking spaces within the parking area.

Phase 3

Phase 3 would extend the trail network and establish regional trail connections. Up to 16.5 miles of trail would be added, with trail connections from the San Vicente Redwoods parking area through the property to BLM's Cotoni-Coast Dairies. Implementation of this phase would be dependent on establishment of connecting trails at the Cotoni-Coast Dairies.

Additional Trails

An additional 2.3 miles of trails would be established if adaptive management monitoring determines that management of public access in previous phases were successfully implemented. These additional trails include three segments, each of which would offer a unique loop experience that connects to Phase 1 or Phase 2 trails. Implementation of these trails would be independent of Phase 3 implementation but would not be established until successful implementation of Phase 2 trails.

Construction

Equipment

Most trail construction would occur by hand with limited use of heavy machinery or vehicles. The use of heavy machinery or vehicles would be limited to areas with existing vehicular access (such as former logging roads) with the exception of the parking area, which would require the use of standard construction machinery and equipment. A temporary construction trailer would be located at the parking area.

Grading, Fill, and Tree Removal

Grading would occur for the proposed parking area only and would include 2,719 cubic yards of cut, 2,867 cubic yards of fill, for a net increase of 76 cubic yards of clean fill to be transported to the site. Preparation of the parking area would require the removal of up to 40 non-native trees and 15 native trees that are 12 inches or greater in DBH. Over 150 native trees that are 12 inches DBH or greater would be retained.

Operation

Visitors

A *Projected Visitor Counts and Parking Needs* report dated January 12, 2016 was prepared by PlaceWorks (see Attachment 10). The visitor counts and parking needs projections were based on attendee levels at comparable parks and open spaces in the area, including The Forest of Nisene Marks State Park, Wilder Ranch State Park, and Soquel Demonstration State Forest. The project is estimated to attract 13,140 to 14,600 people per year at initial opening, and a much as 83,220 to 97,090 people per year in the future. Note that future conditions are greater because they assume the opening of all proposed 38 miles of trails and the opening of planned parking area at BLM's Cotoni-Coast Dairies property, which could facilitate more visitors to the project site.

Management and Maintenance

The project would require ongoing management and maintenance. The proposed San Vicente Redwoods Public Access Plan includes roles for a Public Access Manager and Property Manager to ensure the implementation of the policies, design guidelines, construction protocols, trail maintenance

guidelines, and rules and regulations are strictly enforced. The LTSCC would be the Public Access Manager while the Property Manager would be a contractor to the property owners with expertise in forestry, ecology, and land management. While these managers would have many responsibilities, the following would help to reduce and/or avoid impacts to the environment to the extent feasible.

Visitor Registration and Special Use Permits

All recreational visitors would be required to register using the free Visitor Registration System prior to use of public access. To register, individuals would be required to provide contact information to the Public Access Manager to be used in case of an emergency and also sign up to receive updates on site conditions and status. Once registered, visitors would be required to sign-in upon arrival to the property. Following registration, visitors would be issued a pass (or permit). Permits may also be required for parking at the designated parking area and/or for certain on-trail recreational use at the discretion of the Public Access Manager, Owner(s), and Conservation Easement Holder. Visitors would be required to carry their permits on their person and display a copy on the dashboard of their car when parked at the parking area. Failure to comply with rules may result in the revocation of access permits, as well as citation.

Recreational activities would require a special use permit if they are either (1) not identified as an allowed use, (2) would take place outside of daylight hours, or (3) would not be limited to designated public access trails and use areas. Permits will also be required for groups with more than 20 individuals, any special events (such as organized trail runs), or any off-trail activities.

Recreational uses that would not be allowed on the property through special use permits or under any circumstance include, but are not limited to, fire making, collecting, hunting, fishing, off-leash dogs, off-road vehicles or motorized dirt biking (including electric bikes), trail building and rock climbing, and rappelling. No commercial uses, defined as activities where a fee is charged for a good or service with the intention of making a profit, would be allowed on the property under any circumstances. The designated Closed Area would be managed to receive minimal visitor activity. Smoking and unpermitted alcohol use would not be allowed on the property under any circumstance.

Litter and Waste Management

Trash would be removed at least weekly, and at a frequency sufficient to prevent trash overflow at the receptacles and to minimize wildlife-attracting odors. All trash and recycling receptacles would be wildlife-proof. Signage and visitor education would instruct visitors to pack out and/or properly dispose of all waste. Litter, food scraps, and dog waste would be picked up and disposed of as part of regular monitoring and patrol activities.

Visitor Education

The Property Manager would routinely engage visitors to increase user compliance with closed area designations, and rules regarding litter, food scraps and dog waste, and provide verbal reinforcement of posted rules. Such responsibilities would include educating horseback riders and other visitors about actions they should take to avoid the introduction of non-native plants and animals. Educating horse and dog owners in the actions they must take to protect water quality by cleaning up their animal waste, especially in proximity to streams. Provide bags and trash receptacles in convenient locations. Educating mountain bike riders about actions they must take to avoid erosion and habitat impacts from

unauthorized trail use and/or construction of unauthorized trails. The Laguna tract would be managed as closed to mountain bike use. The Public Access Manager would also collaborate with the Santa Cruz County Department of Public Works to ensure that road shoulder parking would not become an established pattern, through the use of strategies such as no-parking zones and towing.

Monitor and Maintain Public Access Features

The monitoring and maintenance of the parking area, trails, and other public access features (such as fire storage water tanks, signage, furnishings, and monitoring equipment) would be overseen by the Public Access Manager. Monitoring of the parking area and trails would inform the adaptive management strategies and decisions, and a trail maintenance program requiring that trails be inspected every spring and fall would ensure the protection of natural resources on the property.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Except as provided in Public Resources Code section 21099, would the project:

1. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

***Discussion*:** The project is a multiple-use trail system with a parking area that would be set back from Empire Grade. The parking area would be primarily screened from the views of Empire Grade by vegetation. The proposed parking area features (e.g., gates, surface parking, drainage features, signage, benches, picnic tables, restroom building, temporary construction trailer, and fire storage water tanks) and trail features (e.g., water crossings and signage) would not be of a great enough size (height or width) or located in an area that would be visible from a scenic vista or block or obstruct any views of a scenic vista. Although the main tract parking area is located along a County-designated scenic road (discussed under A.2 below), there are no notable scenic vistas in the immediate vicinity of the proposed parking area. Existing trees and vegetation block any sweeping or distant scenic vistas from Empire Grade along the property frontage. All project features would be well below the tree canopy and constructed with natural materials that are visible yet would still blend in with the surrounding environment, such as stone, concrete, metal, and/or wood. Trail users would be able to access scenic vistas of the Santa Cruz Mountains, San Vicente Redwoods, Cotoni-Coast Dairies, and the Pacific Ocean coastline from certain points within the trail system, but the parking area and conceptual trail alignment would have no impact on any existing scenic vista.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐

***Discussion*:** The main tract access point is located along Empire Grade, which is identified as a scenic roadway in General Plan Policy 5.10.10 (Designated Scenic Roads). The existing views along this section of Empire Grade are primarily of dense forest and vegetation lining the roadway on the west side of the road and the limited views of the residential development and the open area associated with the Crest Ranch Christmas Tree Farm on the east. Approaching the parking area from the north or the south on Empire Grade, the natural topography and vegetation currently screen the parking area location from this rural scenic road. General Plan Policy 5.10.11 (Development Visible from Rural Scenic Roads) requires that visual qualities worthy of protection be identified and the development be designed to mitigate any impacts on those visual qualities through siting, architectural design, and landscaping. In this case, the visual qualities worthy of protection are the tree-lined character of Empire Grade which would not be adversely impacted by the construction of the parking/parking area or the trail system due to the preservation of existing vegetation.

The proposed parking area would be set back up to 150 feet at its closest point from Empire Grade (see Figure 3). Due to the setback distance, natural topography, and vegetation, the visible parking area features would be the proposed signage directing users to the parking area, a vegetated storm water basin at the south entrance point to collect runoff from Empire Grade, and gates.

Up to 40 non-native trees and 15 native trees 12 inches or greater DBH would be removed at the parking area and over 150 native trees greater than 12 inches DBH would be retained. All new plantings would be native and regionally appropriate. (See Figure 4)

The Laguna Tract would be accessible only through existing trails on the CDFW Bonny Doon Ecological Reserve. Martin Road (where the CDFW parking area is located) is designated as a scenic road in the County General Plan. However, the existing trails and improvements on the Laguna tract are located approximately 1/2 mile or further from Martin Road and the CDFW parking area and are not visible from the parking area or Martin Road. No impact to scenic resources along Martin Road is anticipated as a result.

The proposed multi-purpose trails at the main tract and the Laguna tract would not be directly visible from any designated scenic roadway, including Empire Grade or Martin Road.

The proposed San Vicente Redwoods Public Access Plan includes the following goals and policies that are required to ensure the protection of public views of the natural and scenic setting of the project site:

Goal Access 4. Minimize the impact on the security, privacy and rural character of the neighborhoods near the property, while achieving the other goals of the Plan.

> **Policy Access 4.1.** Provide buffers between public access features and neighboring properties where feasible.
>
> **Policy Access 4.3.** Design access features to complement the natural character of the San Vicente Redwoods property and the Santa Cruz Mountains, as well as adjacent rural neighborhoods.

Goal Recreation 3. Provide a trail network that supports multiple uses while minimizing conflicts.

> **Policy Recreation 3.2.** Follow appropriate steps to ensure that trail routes avoid the following, to the extent possible: neighbor views, safety hazards, impacts to sensitive resources, and interference with timber harvest operations, other natural resource management, and ongoing general operations.

In addition to these goals and polices, the proposed San Vicente Redwoods Public Access Plan's adaptive management approach would ensure the scenic qualities are preserved and protected in perpetuity. A complete list of the adaptive management strategies is provided the proposed San Vicente Redwoods Public Access Plan. However, the following specific strategies relate to the scenic qualities of the project site:

- Design new trails with a narrow tread to retain full canopy cover
- Inspect trails routinely for widening and erosion; adjust maintenance effort; adjust alignments and grade
- Design the parking area to expand to accommodate demand, minimizing road shoulder and neighborhood parking

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Track the availability of parking and expand the parking area only as needed Due to the presence of extensive natural vegetation and the minimal nature of the proposed improvements, impacts to scenic resources would be less than significant.

3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

***Discussion*:** As discussed in A.2 above, the project is located in a non-urbanized area and would result in some physical changes that would alter the existing visual character of the site, but due to the 150-foot setback from Empire Grade and the presence of existing topography and vegetation between the parking area and Empire Grade, the parking area would not be readily visible to users of Empire Grade. Any new plantings at the parking area would replace non-native trees and be comprised of native species and regionally appropriate species consistent with the natural backdrop in the surrounding area.

Overall, the project would not substantially degrade the existing visual character or quality of the site because it would include parking area and trail features that would be well below the tree canopy and would be constructed with natural materials that are visible yet blend in with the surrounding environment, such as stone, concrete, metal, and/or wood. The views of the site would not be altered due to the natural topography and vegetation. As described in A.2, 40 non-native and 15 native trees that are 12 inches DBH or greater would be removed for the parking area and 150 native trees that are 12 inches DBH or greater would be retained. No large trees (over 40 inches DBH) would be removed. No tree removal would occur in the 150-foot setback between the parking area and Empire Grade.

Furthermore, as described in A.2, the proposed San Vicente Redwoods Public Access Plan includes goals, policies, and adaptive management strategies that would ensure the protection of public views of the natural and scenic setting of the project site and surrounding area. Specifically, Policy Access 4.1 requires that buffers between public access features and neighboring properties be provided and Policy Access 4.3 requires that all design access features complement the natural character of the San Vicente Redwoods property and the Santa Cruz Mountains, as well as adjacent rural neighborhoods. Impacts would be less than significant.

4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

***Discussion*:** Projects resulting in significant light or glare impacts include substantial new light sources, especially in an area (such as the project vicinity) that includes very few artificial light

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

sources, or if they include highly reflective surfaces that can reflect light towards drivers or existing residences. The current visual nighttime setting is very dark with no noticeable light sources visible from adjacent properties. The only proposed lighting would be inside the temporary construction trailer and would not be visible from any off-site properties. The parking spaces at the parking area would be beneath the existing tree-canopy and therefore, there would be limited opportunity from day time glare associated with parked automobiles. Any such glare would not be visible from any off-site properties. Therefore, the project would not be expected to create a new source of light or glare due to the location of the parking area and the limited lighting that is proposed.

B. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not contain Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use. No impact would occur from project implementation.

2. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*	☐	☐	☐	☒

Discussion: The project site is primarily zoned Timber Production (TP) and includes limited areas zoned Special Use (SU), which are not agricultural zoning designations. Additionally, no portion of the subject property is under a Williamson Act Contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act Contract. No impact is anticipated.

3. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in*	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

***Discussion*:** Although the project site is zoned Timber Resource (TP), the project would not conflict with existing zoning for forest land. The project would not affect the resource or access to harvest the resource in the future. As described above in section II, Background Information, under the subheading "Detailed Project Description," Timber Harvest Plan (THP# 1-14-117 SCR) was approved by CAL FIRE (2015) for the project site. The Conservation Vision (2011) established by the Conservation Partners includes integrating preservation, restoration, and sustainable timber harvesting practices with research, education, and recreation. Therefore, the timber resources on the project site may continue be harvested in accordance with California Department of Forestry timber harvest rules and regulations.

In addition, the proposed San Vicente Redwoods Public Access Plan includes the following goals and polices that are required to ensure the ongoing production of timber harvest on the project site:

Goal Access 1. Provide sustainable access consistent with the conservation values of the property.

Policy Access 1.5. Coordinate public access with other property uses, including timber harvest, restoration, and conservation.

Goal Recreation 3. Provide a trail network that supports multiple uses while minimizing conflicts.

Policy Recreation 3.1. Provide trail opportunities that offer a variety of experiences through different habitats, different trail lengths, and difficulty levels.

Goal Education 1. Provide the opportunity for partners to conduct research and education about the resources and activities at San Vicente Redwoods.

Policy Education 1.1. Allow partners to interpret the natural and cultural resources of San Vicente Redwoods, as well as active uses of the property (sustainable timber harvest and restoration activities).

4. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐

***Discussion*:** Forest land does occur on the subject property and the property is actively used for timber harvests. The property will continue to be available for timber harvests and timber harvesting will not be adversely impacted as a result of the project. Proposed trails have been designed in a manner that would not reduce available timber or prevent future timber harvests in the areas where trails are to be constructed. Forest land will not be lost or converted to other uses as a result of the project. See discussion under B.3 above. In the San Vicente Redwoods Public Access Plan, the Public Access Manager is assigned the responsibility to "[c]lose trails and/or parking areas based on seasonal or extended closures, as necessary, to accommodate other property uses including timber harvest…", and to "[u]tilize temporary re-routes and/or trail closures to minimize potential conflicts with timber

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

harvest activities." The plan further states that "[p]ublic access must accommodate timber harvest and restoration forestry, and operations may necessitate re-routing or temporarily closing trails for visitor safety." Impacts would be less than significant.

5. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*	☐	☐	☐	☒

***Discussion*:** As discussed in B.1, the project site and surrounding area does not contain any lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance would be converted to a non-agricultural use.

While the project site contains land zoned for Timber Production, as well as land designated as forest according to the California Department of Forestry and Fire Protection, the project's associated amenities would not prohibit the harvesting of timber. The proposed parking area and trails would be developed on limited portions of the project site and would not convert any of the forest land to any other use, as their primary purpose is for recreation within the forested areas. Pursuant to Santa Cruz County Code section 13.10.371 (Purposes of the Timber Production TP District) the purposes of the TP District include, but are not limited to, the protection and maintenance of the timberland of the County and the preservation of agriculture and other open space uses where compatible with timberland uses. Accordingly, no impact would occur from project implementation.

C. AIR QUALITY

The significance criteria established by the Monterey Bay Air Resources District (MBARD) has been relied upon to make the following determinations. Would the project:

1. *Conflict with or obstruct implementation of the applicable air quality plan?*	☐	☐	☒	☐

***Discussion*:** The project would not conflict with or obstruct any long-range air quality plans of the MBARD.[2] Because general construction related emissions (i.e., temporary sources) are accounted for in the emission inventories included in the plans, impacts to air quality plan objectives are less than significant.

General estimated basin-wide construction-related emissions are included in the MBARD emission inventory (which, in part, form the basis for the air quality plans cited below) and are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within

[2] *Please note that the MBARD recently changed its name from the Monterey Bay Unified Air Pollution Control District.*

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

the North Central Coast Air Basin (NCCAB). Therefore, temporary construction impacts related to air quality plans for these pollutants from the project would be less than significant, and no mitigation would be required, since they are presently estimated and accounted for in the MBARD's emission inventory.

The MBARD has identified screening thresholds and thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including reactive organic gases (ROG), oxides of nitrogen (NOx), and coarse inhalable particulate matter (PM_{10}). Development projects below these significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. The NCCAB does not meet state standards for ozone PM_{10}. Therefore, ozone precursors (ROG and NO_X) and PM_{10} are regional pollutants of concern during construction. Additionally, during operation, the project would result in an increase in mobile sources of air pollutants (i.e., emissions associated with vehicular travel) although it would not consist of any new area or stationary sources of air pollutant emissions. Therefore, emissions associated with operation of the project were modeled by PlaceWorks using the California Emissions Estimator Model (CalEEMod) 2016.3.2 and compared to MBARD thresholds of significance for criteria pollutants of concern during operation. The results of this modeling are included as Attachment 4 of this Initial Study.

Ozone is the main pollutant of concern for the NCCAB. The primary sources of ROG within the air basin are on- and off-road motor vehicles, petroleum production and marketing, solvent evaporation, and prescribed burning. The primary sources of NOx are on- and off-road motor vehicles, stationary source fuel combustion, and industrial processes. In addition, the region is "NOx sensitive," meaning that ozone formation due to local emissions is more limited by the availability of NOx as opposed to the availability of ROGs. The other major pollutant of concern for the NCCAB is PM_{10}. In the NCCAB, the highest particulate levels and most frequent violations occur in the coastal corridor. In this area, fugitive dust from various geological and man-made sources combines to exceed the standard. The majority of all NCCAB exceedances occur at these coastal sites where sea salt is often the main factor causing exceedance.

Construction

Construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., volatile organic compounds (VOC) or oxides of nitrogen (NOx), 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 ambient air quality standards (AAQS). Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Table 5 summarizes the screening thresholds for construction activities. Construction projects below the screening level thresholds shown below are assumed to be below the 82 pounds per day threshold of significance, while projects with activity levels higher than those above may have a significant impact on air quality. Additional mitigation and analysis of the project impact may be necessary for those construction activities.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Table 5: Construction Activity with Potentially Significant Impacts from Pollutant PM_{10}	
Activity	**Potential Threshold***
Construction site with minimal earthmoving	8.1 acres per day
Construction site with earthmoving (grading, excavation)	2.2 acres per day
*Based on Midwest Research Institute, Improvement of Specific Emission Factors (1995). Assumes 21.75 working weekdays per month and daily watering of site.	
Source: MBUAPCD, 2008.	

As required by the MBARD, construction activities (e.g., excavation, grading, on-site vehicles) that directly generate 82 pounds per day or more of PM_{10} would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. Construction projects below the screening level thresholds shown in Table 5 (above) are assumed to be below the 82 pounds per day threshold of significance, while projects with activity levels higher than those thresholds may have a significant impact on air quality. The project would require ground disturbance for the construction of the trails and parking area. Most trail construction would occur by hand with limited use of heavy machinery or vehicles. The proposed parking area would require grading on 0.88-acres of the 4.7-acre parking area. Thus, acreage disturbed by the project is below the MBARD's screening threshold of 2.2 acres per day for construction projects involving earthmoving. Because construction associated with the project would not exceed this screening threshold, quantification of construction emissions is not necessary and are assumed to be below this threshold.

Although the project would produce PM_{10}, because it would fall below the screening threshold of 2.2 acres per day, it would be far below the 82 pounds per day threshold. Thus, construction of the project would result in less-than-significant impacts on air quality.

Regardless, the proposed San Vicente Redwoods Public Access Plan includes the following Air Quality (AQ) construction protocol to ensure construction emission from PM_{10} (fugitive dust) from construction of the parking area are reduced as much as possible:

Construction Protocol AQ 1.1. During construction of the parking area, construction emissions from fugitive dust shall be minimized to the fullest extent through implementation of the following Best Management Practices (BMPs) as applicable:

- Water all active construction areas as necessary and indicated by soil and air conditions.
- When materials are transported off site, all material will be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container will be maintained.
- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, will be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, and cut & fill activities will be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Hydroseed or apply similarly effective soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (nontoxic) soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1%.
- Replant vegetation in disturbed areas as quickly as possible.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 20 miles per hour.

Operation

The primary source of long-term criteria air pollutant emissions generated by the project would be emissions from project-generated vehicle trips. The project would generate approximately up to 420 average daily trips (weekend) upon buildout. The project would not generate substantial emissions from area sources (e.g., landscape fuel use, aerosols, and architectural coatings) or energy use (natural gas). Table 6 identifies the criteria air pollutant emissions associated with the project. As shown in Table 6, the net operational emissions generated by the project would not exceed the MBARD daily thresholds and no mitigation measures are required. Consequently, the project would not cumulatively contribute to the nonattainment designations of the NCCAB, and regional operational phase air quality impacts would be less than significant.

Table 6: Regional Operation-Phase Criteria Air Pollutant Emissions

	Criteria Air Pollutants (lbs/day)				
	ROG	NO_x	CO	SO_2	PM_{10}
Area Sources	<1	<1	<1	<1	<1
Mobile Sources	1	1	7	<1	2
Total	1	1	7	<1	2
MBARD Threshold	137	137	550	150	82
Exceeds Threshold?	No	No	No	No	No

Source: CalEEMod Version 2016.3.2. Based on year 2025 emission rates. Emissions may not total to 100% due to rounding.
Notes: lbs/day = pounds per day

Carbon Monoxide

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

MBARD provides a list of scenarios that could result in a potentially significant impact from increased concentrations of CO on roadway intersections or segments. According to the MBARD CEQA Guidelines, the following would represent a potentially significant impact from CO:

- Intersections or road segments that operate at (Level of Service) LOS D or better that would operate at LOS E or F with the project's traffic;
- Intersections or road segments that operate at LOS E or F where the volume-to capacity (V/C) ratio would increase 0.05 or more with the project's traffic;
- Intersections or road segments that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic;
- Un-signalized intersections which 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
- The project would generate substantial heavy-duty truck traffic, substantial traffic along urban street canyons, or substantial traffic near a major stationary source of CO.

Given that in all scenarios the level of service in the area would be at LOS C or better, the scenarios described above would not occur. Additionally, the project would not generate substantial heavy-duty truck traffic and would not generate substantial traffic near a major stationary source of CO. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

2. *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?*	☐	☐	☒	☐

Discussion: This section analyzes potential impacts related to air quality that could occur from a combination of the project with other past, present, and reasonably foreseeable projects within the NCCAB. The NCCAB does not meet state standards for ozone and particulate matter (PM_{10}). Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Project construction would have a limited and temporary potential to contribute to existing violations of California air quality standards for ozone and PM_{10} primarily through diesel engine exhaust and fugitive dust. The project would not have a significant long-term operational phase impact. Therefore, the project would not result in a cumulatively considerable net increase in criteria pollutants. The impact on ambient air quality would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

***Discussion*:** Diesel exhaust contains substances (diesel particulate matter [DPM], toxic air contaminants [TACs], and mobile source air toxics [MSATs]) that are suspected carcinogens, along with pulmonary irritants and hazardous compounds, which may affect sensitive receptors such as young children, senior citizens, or those susceptible to respiratory disease. Where construction activity occurs in proximity to long-term sensitive receptors, a potential could exist for unhealthful exposure of those receptors to diesel exhaust, including residential receptors.

The project is located in the Santa Cruz Mountains and the nearest sensitive receptors include approximately 50 single-family homes with the closest being approximately 950 feet across Empire Grade to the east of the proposed parking area. MBARD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. The Office of Environmental Health Hazard Assessment adopted new guidance for the preparation of health risk assessments in March 2015. Emissions from construction equipment primarily consist of DPM, and the Office of Environmental Health Hazard Assessment has developed a cancer risk factor and noncancer chronic reference exposure level for DPM. These factors are based on continuous exposure for over a 30-year time frame, and because the project is anticipated to be developed over three phases, each spanning 1 to 3 years, exposure of offsite receptors to DPM would be limited. Likewise, because construction is anticipated to occur intermittently over multiple one-to three-year phases, the sensitive receptors would be affected for a fraction of the 70-year maximum exposed individual criteria used for assessing public health risk due to emissions of certain air pollutants. For these reasons, it is anticipated that construction emissions would not pose a threat to offsite receptors near the project site.

Due to the intermittent and short-term temporary nature of construction activities, emissions of DPM, TACs, or MSATs would not be sufficient to pose a significant risk to sensitive receptors from construction equipment operations during the course of the project. The project would not be expected to expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

Carbon Monoxide

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the State one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in the greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

MBARD provides a list of scenarios that could result in a potentially significant impact from increased concentrations of CO on roadway intersections or segments. According to the MBARD CEQA Guidelines, the following would represent a potentially significant impact from CO:

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

- Intersections or road segments that operate at (Level of Service) LOS D or better that would operate at LOS E or F with the project's traffic;
- Intersections or road segments that operate at LOS E or F where the volume-to capacity (V/C) ratio would increase 0.05 or more with the project's traffic;
- Intersections or road segments that operate at LOS E or F where delay would increase by 10 seconds or more with the project's traffic;
- Un-signalized intersections which 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
- The project would generate substantial heavy-duty truck traffic, substantial traffic along urban street canyons, or substantial traffic near a major stationary source of CO.

Given that in all scenarios the level of service in the area would be at LOS C or better, the scenarios described above would not occur. Additionally, the project would not generate substantial heavy-duty truck traffic and would not generate substantial traffic near a major stationary source of CO. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

4. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion: California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight would be used in all diesel-powered equipment during construction, which minimizes emissions of sulfurous gases (sulfur dioxide, hydrogen sulfide, carbon disulfide, and carbonyl sulfide). Therefore, a minimal amount of objectionable odors associated with other emissions are anticipated from construction activities associated with the proposed Project, and no mitigation measures would be required. Once constructed, the project would not create other emissions resulting in objectionable odors affecting a substantial number of people; therefore, impacts are expected to be less than significant.

D. BIOLOGICAL RESOURCES

Would the project:

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

Discussion: A Biological Resources Assessment was prepared for this project by WRA Inc. dated June 2018 (Attachment 5). In a letter dated July 16, 2018, County staff accepted the Biological

Resources Assessment and found the study's recommendations to be complete with some modifications, which are represented in this Initial Study.

Although the project site covers a large amount of land (approximately 8,500 acres), the proposed parking area and trails would be limited in their extent and location, thereby providing ample untouched lands for plant and wildlife conservation. The location of proposed parking area and preliminary trail alignments were selected based on input from professional biologists, amongst other experts, to minimize impacts on the land and sensitive resources. Likewise, the proposed San Vicente Redwoods Public Access Plan includes goals, policies, and implementation strategies, as well as design and maintenance guidelines, and construction protocol to protect natural resources. Biological Resources (BR) construction protocols required by the San Vicente Redwoods Public Access Plan were specifically prepared by WRA to reduce the potential for long-term adverse impacts related to special-status species, sensitive habitat, erosion, sedimentation, and other issues that can arise from improper trail design. Moreover, the low-impact recreational uses of the project as well as the educational and research activities that would be allowed on the site are by their very nature compatible with wildland conservation. The following discussion summarizes the potential impacts identified in the Biological Resources Assessment and the proposed San Vicente Redwoods Public Access Plan's required BR construction protocols. The draft protocols from the San Vicente Redwoods Public Access Plan have been reviewed and edited by County staff and the resulting protocols are discussed below and incorporated as Mitigation Measures BIO-1 through BIO-7 in this Initial Study.

Based on the results of the Biological Resources Assessment, it was determined that the project site contains sensitive resources that could potentially be adversely impacted by construction and operation of the proposed parking area and trail improvements. Elements of at least eight sensitive terrestrial biological communities and three sensitive aquatic biological communities were observed within the areas where the construction and operation of trails would occur. One special-status plant, Anderson's manzanita *(Arctostaphylos andersonii)*, was determined to be present. Based on a lack of observations during seasonally-timed surveys, it was determined that other special-status plants are unlikely to occur within the areas where the proposed parking area would occur and the location of the preliminary trail alignments. The project site contains designated critical habitat for the California Red Legged Frog *(Rana aurora)*. Two special-status wildlife species were also determined to be present, the San Francisco dusky-footed woodrat *(Neotoma fuscipes annectens)* and oak titmouse *(Baeolophus inornatus)*. Another 13 special-status wildlife species were determined to have moderate to high potential to occur on the property, including the following:

Bats. Townsend's big-eared bat *(Corynorhinus townsendii)* hoary bat *(Lasiurus cinereus)*, pallid bat *(Antrozous pallidus)*, western red bat *(Lasiurus blossevillii)*, silver-haired bat *(Lasionycteris noctivagans)*, fringed myotis *(Myotis thysanodes)*

Birds and other Avian Species. Vaux's swift *(Chaetura vauxi)*, Nuttall's woodpecker *(Picoides nuttallii)*, Allen's hummingbird *(Selasphorus sasin)*, olive-sided flycatcher *(Contopus cooperi)*, purple martin *(Progne subis)*, and marbled murrelet *(Brachyramphus marmoratus)*

Mammals: mountain lion *(Felis concolor)*

Given the presence of the species noted above, the project could result in a potentially significant impact to special-status species if the project is not properly mitigated to prevent impacts to biotic resources.

Mitigation Measure BIO-1

In addition to implementing construction protocols BR-1.1 through BR-1.15 pursuant to Mitigation Measure BIO-4 below, the following construction protocols are required to ensure the protection of special-status plant species.

Construction Protocol BR-2.1. All occurrences of special-status plants within 50 feet of any work areas shall be flagged by a qualified, County-approved biologist prior to construction. Where work will occur within 10 feet of a special-status plant to be preserved, orange construction fencing (or similar) shall be installed at the edge of the work area and no work shall occur beyond the fence. If there are occurrences of special-status plants downslope from the work area, silt fencing shall be installed at the edge of the work area to prevent soil or other materials from being transported downslope where they may impact special-status plants.

Construction Protocol BR-2.2. Occurrences of special-status plants shall be avoided by re-routing the trail alignment to the extent feasible and practicable. Where this is not possible, impacts to special-status plants shall be minimized by reducing the trail width and associated vegetation removal to the fullest extent feasible. At a minimum, the full width of the trail (i.e., the full extent of vegetation removal) should avoid the dripline of any special-status shrubs and should avoid special-status herbs by a minimum of 10 feet. If trails are re-routed, they should be re-routed downslope, where feasible, of any special-status plants to avoid causing erosion or sedimentation issues which could be detrimental to special-status plants. If not feasible then re-route the drainage away from the special-status plants. If other considerations such as slope or soil stability make it impossible to avoid special-status plants, a qualified, County-approved biologist shall apply a combination of propagation from local seed and habitat enhancement to repair, rehabilitate, or restore the impacted environment.

Mitigation Measure BIO-2

In addition to implementing Construction Protocol BR 1.1 through 1.15 pursuant to Mitigation Measure BIO-4 below, the following construction protocols are required to ensure the protection of special-status wildlife species.

Construction Protocol BR-3.1. Tree removal and trimming, regardless of size, may take place outside of both the maternity and hibernation period for special-status bats (between September 1st and October 31st) and avoid the breeding bird window per Protocols BR 3.4 and BR 3.5. Tree removal can take place during this period (between September 1st and October 31st) without a breeding bird or bat roost survey.

Construction Protocol BR-3.2. If removal of large trees (e.g., the DBH is greater than 12 inches) occurs during the bat roosting season (November 1st through August 31st), these trees shall be inspected by a qualified, County-approved biologist for the presence of bat roosts. If a maternity roost is detected, up to a 200-foot buffer shall be placed around the maternity site until the bats are no longer utilizing the site. Non-maternity roost sites can be removed under the direction of a qualified, County-approved biologist. Any large tree that will be removed shall be left on the ground for 24 hours before

being taken offsite or being chipped. This period will allow any day-roosting bats the opportunity to leave before the tree is either removed from the area or is chipped.

Construction Protocol BR-3.3. Consultation with the CDFW shall be initiated to determine appropriate conservation measures if active roosting bat sites are disturbed.

Construction Protocol BR-3.4. Conduct pre-construction breeding bird surveys if construction, vegetation removal, or ground disturbance activities occur during the breeding season (February 1 to August 31). Pre-construction surveys shall be conducted by a qualified individual within 14 days of the start of these activities to avoid disturbance of active nests, eggs, and/or young. If these activities stop or lapse for a period of 14 days or more during the breeding season, a follow-up breeding bird survey shall be conducted to ensure no new breeding activity has occurred within the anticipated work area. Outside of the breeding season, no pre-construction breeding bird survey would be required for construction, vegetation removal, or ground disturbance activities.

Construction Protocol BR-3.5. If nesting birds are identified, an exclusion zone in which no construction activities would be allowed shall be established around any active nests of any avian species protected by the Migratory Bird Treaty Act and California Fish and Game Code until a qualified, County-approved biologist has determined that all young have fledged. Suggested exclusion zone distances differ depending on species, location, and placement of nest, and shall be at the discretion of the biologist based on the species in question, the proximity of the nest to the work area, and the type of work being conducted (e.g., use of hand tools versus gas-operated machinery).

Construction Protocol BR-3.6. During construction, all workers shall ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the construction area is deposited in covered or closed trash containers. The trash containers shall not be left open and unattended overnight.

Construction Protocol BR-3.7. A pre-construction survey of the parking area shall be conducted by a qualified, County-approved biologist to flag and delineate any woodrat middens within the planned disturbance footprint. During construction of the parking area, a biological monitor shall be onsite to ensure vegetation and ground disturbance with heavy equipment shall not impact those delineated resources. When avoidance of woodrat middens is not possible, the qualified, County-approved biologist shall dismantle the nest in accordance with Construction Protocol BR 3.9.

Construction Protocol BR-3.8. During construction and trail installation, a qualified, County-approved biologist or trained designee from the contractor's crew shall identify woodrat middens located along the trail alignment. If the latter, a qualified, County-approved biologist shall provide the training prior to the start of each construction phase. To the extent feasible and practicable, the trail alignment shall avoid woodrat middens by re-routing the trail alignment. Where this is not possible, implementation of Construction Protocol BR-3.9 would be required.

Construction Protocol BR-3.9. When construction of the trail alignment or the parking area would result in a direct impact to a woodrat midden, a qualified, County-approved biologist shall dismantle the nest and scatter the nest material a minimum of 10 feet outside of the trail alignment or the footprint of the parking area. If woodrat middens with young are encountered during the dismantling process, the material shall be placed back on the nest and the nest shall remain unmolested for three

weeks in order to give the young enough time to mature and leave on their own accord. After three weeks, the nest dismantling process may resume. In the event that a nest must be relocated, the following procedures shall be adhered to:

a) Prior to nest disturbance, the biologist shall obtain from CDFW a scientific collection permit for the trapping of the dusky-footed wood rats.

b) Nests shall be disturbed or dismantled only during the non-breeding season, between October 1 and December 31.

c) At least two weeks prior to construction, the qualified biologist shall survey the project disturbance area to confirm the wood rat nest location and locate any other nests that may have been built in the project vicinity that may be affected by the proposed development.

d) Prior to nest disturbance, woodrats shall be trapped at dusk of the night set for relocation of the nest(s).

e) Any existing nest that may be disturbed by construction activities shall be mostly dismantled and the material spread in the vicinity of identified nest relocation site(s).

f) In order to avoid the potential health effects associated with handling rodents and their milieu, all workers involved in the handling of the wood rats or the nest materials should wear protective gear to prevent inhalation of contaminant particulates, contact with conjunctiva (eyes), and protection against flea bites; a respirator, eye protection, and skin protection should all be used.

g) Dismantling shall be done by hand, allowing any animals not trapped to scape either along existing wood rat trails or toward other available habitat.

h) If a litter of young is found or suspected, nest materials shall be replaced, and the nest left along for 2-3 weeks before recheck to verify that young are capable of independent survival before proceeding with nest dismantling.

i) Woody debris shall be collected from the area and relocated nests shall be partially constructed in an area determined by the qualified biologist to be both suitable for the wood rats and far enough away from the construction activities that they will not be impacted.

j) Rats that were collected at dusk shall be released hours before dawn near the newly constructed nests to allow time for rats to find refuge.

k) Once construction is complete, the biologist shall survey the nest area to note whether the new nests are in use, the wood rats have built new nests, or the nest area has been completely abandoned. This information shall be reported in a letter report to the Environmental Planning Section of the Planning Department, and the local CDFW biologist.

Construction Protocol BR-3.10. A qualified, County-approved biologist shall conduct a pre-construction survey immediately prior to the start of any ground-disturbing activities for stream crossings and areas within 100 feet of wetted features. If California red-legged frog (CLRF) are found

within the work area, all work shall cease within the immediate vicinity (approximately 25 feet around the work area) until the individual(s) have been allowed to leave the work area on their own. If CRLF cannot passively leave the work area, work shall cease and the USFWS shall be contacted by the qualified, County-approved biologist to determine the appropriate course of action. The qualified, County-approved biologist shall then implement the appropriate course of action as determined by the USFWS.

Construction Protocol BR-3.11. Because dusk and dawn are often the times when CRLF are most active and likely to disperse, all construction activities shall cease one half hour before sunset and shall not begin prior to one half hour after sunrise. Furthermore, no mechanized work shall occur during significant rain events, defined here as 0.25 inch or greater within a 24-hour period, when CRLF are more likely to disperse and occur within the work area.

Mitigation Measure BIO-3

Educational signage should be placed within the parking lot and at picnic areas informing the public to remove trash and food waste. Signage should provide information on the marbled murrelet and the impact that corvid and avian predators can have on nest sites. This education signage should be in place prior to opening the trails for public access and should be routinely maintained by the Public Access Manager to ensure that signage is not obstructed and is legible at all times.

Level of Impact after Implementation of Mitigation Measures

The above Mitigation Measures BIO-1, BIO-2, and BIO-3 in conjunction with Mitigation Measure BIO-4 below, would reduce potential impacts special-status plants and wildlife to a less-than-significant level.

In addition, the proposed San Vicente Redwoods Public Access Plan's adaptive management approach would further ensure the biological resources on the project site are preserved and protected in perpetuity. The following specific strategies relate to biodiversity on the project site:

- Locate the public access area and the closed area to provide large areas of core habitat
- Monitor and enforce closed areas for unauthorized access; adjust patrol and enforcement effort; impose use restrictions
- Locate the public access area to minimize activity in identified corridors, especially at night
- Monitor and enforce night time and area closures; adjust patrol and enforcement effort
- Zone public access and closed areas to retain large contiguous closed blocks of habitat
- Monitor closed areas for unauthorized access; adjust education and enforcement effort
- Provide a nature-based recreation opportunity with a skyline-to-the-sea type transect of Ben Lomond Mountain
- Provide large closed areas around mountain lion denning areas
- Patrol for unauthorized trail construction; prosecute and/or sue violators; decommission unauthorized trails; impose use restrictions
- Manage waste with education and wildlife-proof trash receptacles
- Track food waste; adjust visitor engagement and waste management effort

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

- Require that contractors clean vehicles of dirt and organic material
- Monitor and manage invasive plants in the public access area

2. *Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*	☐	☒	☐	☐

***Discussion*:** A range of sensitive terrestrial and aquatic biological communities occur within the project site, including: madrone forest, tanoak forest, coast live oak woodland, canyon live oak forest, redwood forest, California bay forest, Anderson's manzanita chaparral, brittle leaf manzanita chaparral, seasonal wetlands, shrub-scrub wetlands, and streams (including limited riparian vegetation). The conceptual trail network has the potential to impact these communities through both initial trail construction and subsequent use and maintenance. Impacts would be effectively mitigated by incorporating the following mitigation measures, as specified in the San Vicente Redwoods Public Access Plan.

Mitigation Measure BIO-4

Implement the following Biological Resources (BR) construction protocols from the San Vicente Redwoods Public Access Plan:

Construction Protocol BR-1.1. The construction work area including the parking area shall be minimized to the fullest extent feasible and trails shall be limited to the minimum width necessary to support the proposed use (i.e., hiking, cycling, and horse riding) as detailed in Table 3 (Trail Dimensions by Use Type).

Construction Protocol BR-1.2. Prior to the start of construction, all construction personnel shall be educated on the sensitivity of the biological communities and species at the site by a qualified, County-approved biologist. Environmental awareness training shall include measures to avoid or reduce impacts to the community, reporting and follow-up actions if sensitive biological communities are impacted, and the worker's responsibility under the applicable environmental regulation(s). A designated staff member from the contractor's crew shall provide follow-up training to any employees who begin work after the initial pre-construction training.

Construction Protocol BR-1.3. Trails should be routed around sensitive vegetation to the fullest extent feasible. At a minimum, the full width of the trail (i.e., the full extent of vegetation removal and ground disturbance during construction) should avoid the dripline of sensitive vegetation, with greater separation between the trail and sensitive vegetation being preferred. If trails are re-routed, they should be re-routed downslope of any sensitive vegetation to avoid causing erosion or sedimentation issues which could be detrimental to sensitive vegetation.

Construction Protocol BR-1.4. Tree and shrub removal in sensitive biological communities shall be minimized to the fullest extent feasible. Where necessary, obtaining a tree removal permit may be required per Santa Cruz County Code Chapter 16.34, Significant Trees Protection. Tree removal should be conducted by a licensed arborist or registered professional forester using industry-standard BMPs to prevent the spread of invasive weeds or plant pathogens and avoid damage to vegetation to be retained.

Construction Protocol BR-1.5. Trail construction shall incorporate the best available technology and industry-standard BMPs to minimize the potential for detrimental impacts such as erosion or sedimentation and to minimize the need for future maintenance.

Construction Protocol BR-1.6. Any restoration or landscape plantings (e.g., plantings around the proposed parking/parking area) shall use native species appropriate for plant communities found at the site. To the extent feasible, plant material shall be salvaged from trail construction activities at the site. If not possible, plant material shall be propagated by a reputable nursery with protocols in place for minimizing the potential spread of plant diseases (sudden oak death or other *Phytophthora*-related diseases). Any propagated plant material shall be sourced from as close to the site as possible, ideally from within the site itself to avoid genetic variation.

Construction Protocol BR-1.7. Stream crossings should ideally be designed and constructed to freespan the channel and be anchored above the top of bank. Crossings of regulated streams that avoid work below the ordinary high-water mark do not require a permit from the United States Army Corps of Engineers (USACE). When required, notify the CDFW and the Central Coast Regional Water Quality Control Board (RWQCB) of the crossing, even if located above the top of bank. If the CDFW and/or RWQCB issue authorizations for such work, the measures included in any such authorizations shall be incorporated into the design.

Construction Protocol BR-1.8. Where wetlands or streams cannot be avoided, appropriate approvals from the USACE (for impacts to regulated wetlands or areas below the ordinary high water mark of regulated streams) and/or the RWQCB and the CDFW (for impacts to regulated wetlands, riparian vegetation, or areas below the top of bank of regulated streams) shall be secured prior to initiating work in these areas. The measures included in any such authorizations shall be incorporated into the design.

Construction Protocol BR-1.9. Trails constructed near wetlands or streams shall be designed to minimize changes to pre-project hydrology. Avoid erosion or sedimentation by installing BMPs (e.g., silt fencing, wattles, sterile straw, hydromulch, geotextile fabrics, sediment traps, drainage swales, or sand bag dikes) around wetlands and streams. All materials shall be certified weed-free and must be constructed of natural materials. No plastic monofilament netting may be used. The exact location and configuration of BMPs shall be determined by the contractor based on specific site conditions and the type of work being conducted. BMPs shall remain in place until all disturbed ground has been stabilized either through compaction or re-vegetation.

Construction Protocol BR-1.10. Equipment used for building new trails should generally have tread width of 48 inches or less and mass less than 10,000 pounds.

Construction Protocol BR-1.11. To avoid the introduction and prevent the spread of invasive weeds or plant pathogens, prior to arriving on the site, all construction equipment and vehicles shall be inspected to ensure they are clean.

Construction Protocol BR-1.12. Any equipment or vehicles that have been used in areas with known sudden oak death or other *Phytophthora*-related plant diseases shall be sterilized before being used and inspected by a qualified, County-approved biologist prior to entering the job site.

Construction Protocol BR-1.13. All disturbed ground shall be stabilized concurrent with or immediately following construction. Stabilization methods may include: compacting the soil (for trail surfaces only), covering disturbed soils with duff and leaf litter as well as branches removed for construction of trails, revegetation using appropriate native plant species, or use of other standard erosion control measures such as weed-free straw or hydromulch. If disturbed areas are to be revegetated, only native plants appropriate for the habitat shall be used per Construction Protocol BR-1.6. If other erosion control materials are to be used, they shall be certified weed-free and as otherwise specified in Construction Protocol BR-1.9.

Construction Protocol BR-1.14. The importation of soils for construction of the parking area or other parts of the site shall be minimized to the fullest extent feasible. To the extent feasible, soils shall be salvaged from onsite before being imported from offsite. If it is necessary to import soils, they shall be certified weed-free and from a qualified, County-approved source with protocols in place for minimizing the potential spread of plant diseases (e.g., sudden oak death or other *Phytophthora*-related diseases).

Construction Protocol BR-1.15. Equipment and vehicle fueling and maintenance parking areas shall be at least 100 feet from any wetland or stream. A spill containment kit shall be provided at the work site and located within 50 feet of the fueling or maintenance area. All spills shall be cleaned immediately (i.e., within 5 minutes of the spill) and all resulting materials shall be disposed of properly. All construction vehicles shall be inspected daily for leaks of oil, hydraulic fluid, or other potentially hazardous materials by a qualified construction crew member and drip pans shall be placed under parked vehicles during prolonged periods of disuse (e.g., during evenings and weekends).

Mitigation Measure BIO-5

To minimize the introduction of invasive plants or plant pathogens that could threaten sensitive vegetation, parking and parking areas should include signage or other materials aimed at instructing the general public on the potential threats associated with invasive plants, plant pathogens, and other pests of concern. These materials should include basic prevention methods that the general public can implement such as inspecting shoes and pet fur for weed seeds or avoiding the movement of plant material or soil from one area to another. This education signage should be in place prior to opening the trails for public access and should be maintained annually by the Public Access Manager to ensure that signage is not obstructed and is legible at all times.

Mitigation Measure BIO-6

To minimize impacts to sensitive vegetation from use of the trail network, the trail maintenance system should be implemented as described in Chapter 6 of the San Vicente Redwoods Public Access Plan. The trail maintenance system includes an annual monitoring program aimed at identifying

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

maintenance issues (e.g., erosion) and other problems (e.g., nuisance trash areas or other impacts from trail users). The trail maintenance system should include specific methods for routinely documenting and implementing the necessary maintenance by the Public Access Manager.

Mitigation Measure BIO-7

All picnic locations shall be located outside of old-growth stands.

Level of Impact after Implementation of Mitigation Measures

The above listed Mitigation Measures would reduce potential impacts sensitive biological communities on the project site to a less-than-significant level. In addition, the adaptive management strategies of the proposed San Vicente Redwoods Public Access Plan would further ensure that impacts would be less than significant.

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐

***Discussion*:** The project has the potential to directly affect sensitive aquatic communities that may be protected by the Clean Water Act or other Federal, State, or local laws through removal of vegetation, placement of fill, or other grading activities that could impact wetlands, the bed and bank of streams, or riparian vegetation. The project also has potential to indirectly impact sensitive aquatic communities through increased rates of erosion and sedimentation, the introduction of invasive weeds, and other disturbances from trail construction, trail users, or trail maintenance. The trail network may also entail minor impacts to vegetation within the buffers of Sensitive Habitats and Environmentally Sensitive Habitats protected under the County of Santa Cruz General Plan and Local Coastal Program; however, passive recreational trails are an allowed use within riparian corridors and buffer areas.

The proposed San Vicente Redwoods Public Access Plan includes trail design guidelines for new trails and for trails to be developed from existing timber harvest roads, which represent approximately 30% or 12 miles of the proposed 38 miles of trails. New trails have specific guidelines for layout, orientation, switchbacks and climbing turns, and drainage. The proposed San Vicente Redwoods Public Access Plan also includes construction protocols and maintenance guidelines that would ensure that all trail construction and maintenance would prevent erosion to the degree feasible. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed. Detailed guidelines and construction protocols are provided the San Vicente Redwoods Public Access Plan.

The implementation of the proposed San Vicente Redwoods Public Access Plan requirements in conjunction with the recommendations of the Biological Resources Assessment and the Mitigation Measures as discussed in D.2 above, the project would not have a significant adverse impact to any wetlands, streams, or their buffers/riparian corridor. Impacts to sensitive aquatic communities that may be protected by the Clean Water Act or other Federal, State, or local laws from implementation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

of the project would be less than significant with mitigation incorporated. In addition, the proposed San Vicente Redwoods Public Access Plan's adaptive management approach would further ensure the sensitive habitats on the project site are preserved and protected in perpetuity. A complete list of the adaptive management strategies is provided in the proposed San Vicente Redwoods Public Access Plan. However, the following specific strategies relate to surface water and watershed protection on the project site:

- Maintain trails so they don't widen or erode; adjust effort if problems arise
- Route trails away from municipal water intakes with large buffers
- Monitor closed areas for unauthorized access; educate and enforce closures
- Design and maintain trails to frequently shed water and minimize erosion and close the property following significant rain events until soils dry
- Monitor trails for sediment delivery to streams or wetlands; remediate problems promptly and monitor and enforce closures; adjust staffing as needed
- Span streams with bridges and route trails around wetlands unless that results in greater overall impacts
- Track and remediate horse and dog waste near streams and wetlands; impose use restrictions

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

***Discussion*:** The project site is located within the western portion of an important wildlife corridor identified by the CDFW. Wildlife corridors and essential connectivity areas have been mapped by the CDFW to include the project site and continuing through to the north, east, and southeast. The proposed parking area and conceptual trail network have the potential to impact wildlife migration, including mountain lion, through the introduction of new human disturbance and increased noise. New scents would also occur as multi-use trails allow horses and dogs to access the area. The project would not, however, result in the development of any physical structures or barriers that would restrict or prevent wildlife migration (i.e., no new roads, large fences, urban development, etc.). The property will be closed at night, providing wildlife an opportunity to move through public access areas. Mountain lion and other native species often utilize human-use trail networks, and the development of a parking area and multi-use trails within the project site is not anticipated to adversely affect wildlife corridors or movement. In addition, the adaptive management strategies of the proposed San Vicente Redwoods Public Access Plan, as discussed in D.1 above, would further ensure impacts would be less than significant. Specifically, the location of the public access areas and the closed areas would provide large areas of core habitat and provide large closed areas around mountain lion denning areas that would minimize impacts to mountain lion breeding and connectivity to adjacent habitat areas.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. *Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?*	☐	☐	☒	☐

Discussion: The trail network and parking area have the potential to directly impact trees protected under the Santa Cruz County Code Chapter 16.34 (Significant Trees Protection). Protected trees include larger trees in the Coastal Zone and trees within sensitive habitats as defined by Santa Cruz County Code Chapter 16.32 (Sensitive Habitat Protection). Per Chapter 16.34, a permit may be needed for tree removals within the Coastal Zone and Sensitive Habitat that meet certain definitions. Note that the project site includes an active Timber Harvest Plan and tree removals related to an approved Timber Harvest Plan are exempt from the requirements of Chapter 16.34.

The proposed parking area and conceptual trail alignment would avoid the removal of trees larger than 12 inches in DBH. The proposed San Vicente Redwoods Public Access Plan includes construction protocols BR-1.3 and BR-1.4 (as discussed in B.2 above). BR-1.3 requires trails to be routed around sensitive vegetation to the fullest extent feasible, and BR-1.4 requires that tree and shrub removal in sensitive biological communities be minimized to the fullest extent feasible. Where necessary, a tree removal permit may be required per County Code Chapter 16.34 (Significant Trees Protection).

See discussions and Mitigation Measures specified under D.1 and D.2 above. No wetlands would be impacted by the project, and riparian areas would be protected through the Riparian Exception permitting process. Impacts from project implementation would be less than significant with mitigation incorporated.

6. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*	☐	☐	☐	☒

Discussion: The project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

7. *Produce nighttime lighting that would substantially illuminate wildlife habitats?*	☐	☐	☐	☒

Discussion: All construction would be completed during daylight hours. All use and activities are proposed to occur during daylight hours. No nighttime lighting is proposed, and no impacts from project implementation would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

E. CULTURAL RESOURCES

Would the project:

1.	*Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☐	☐	☒

Discussion: There are no existing structures on the parcels where the proposed parking area and trails would occur. The project site does not contain any designated historic resource as identified on any federal, state, or local inventory.

2.	*Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*	☐	☒	☐	☐

Discussion: A *Cultural Resources Study* was prepared by Tom Origer & Associates in October 2017 for the project. In a letter dated July 16, 2018 (Attachment 6), County staff accepted the *Cultural Resources Study* and found the study's recommendations to be complete with some modifications, which are represented in this Initial Study. The cultural resources study includes confidential information regarding the locations of archaeological resources that is protected by law and is not available to the general public. This confidential information will be kept on file with the County of Santa Cruz Planning Department.

The location of proposed parking area and preliminary trail alignments were selected in part based on input from professional archaeologists at Tom Origer & Associates, amongst other experts, to minimize impacts on the land and sensitive resources. Likewise, the proposed San Vicente Redwoods Public Access Plan includes goals, policies, and implementation strategies, as well as design and maintenance guidelines, and construction protocol to protect resources. Specifically, Cultural Resources (CR) construction protocols required by the San Vicente Redwoods Public Access Plan were strategically prepared by Tom Origer & Associates to reduce the potential for adverse impacts related to both known and unknown cultural resources. The following discussion summarizes the impacts of the *Cultural Resources Study* and the proposed San Vicente Redwoods Public Access Plan's required CR construction protocols. The draft protocols from the San Vicente Redwoods Public Access Plan have been reviewed and edited by County staff and the resulting protocols are discussed below and incorporated as Mitigation Measures CUL-1 through CUL-4 in this Initial Study.

Records Search and History Map Review

Archival research included examination of the library and project files at Tom Origer & Associates. A review was also completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC File No. 12-0751), Sonoma State University, Rohnert Park. Sources of information included, but were not limited to, the current listings of properties on the National Register of Historic Places (NRHP), California Historical Landmarks, California Register of Historical Resources (CRHR), and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory*. In addition,

previous survey base maps and survey reports were reviewed at the California Department of Forestry and Fire Protection (CAL FIRE) Archaeological Program in Santa Rosa, California. Maps ranged from hand-drawn maps of the 1800s (e.g., General Land Office) to topographic quadrangles issued by the United States Geological Survey. In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed.

The result of the above research yielded that 22 cultural resources surveys were conducted within portions of the main tract and Laguna Tract, and resulted in the findings of 25 cultural resources on the sites. These studies revealed the presence of prehistoric archaeological sites and isolated artifacts.

Tribal Consultation

The State of California's Native American Heritage Commission (NAHC), members of the Amah Mutsun Tribal Band, members of the Costanoan Ohlone Rumsen-Mutsen Tribe, members of the Indian Canyon Mutsun Band of Costanoan, members of the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, members of the Trina Marine Ruano Family, Jakki Kehl, and Linda Yimane were contacted in writing. The NAHC responded via email on December 15, 2015 and provided a list of contacts and their information. Patrick Orozco (from the Pajaro Valley Ohlone Indian Council) responded in late December via telephone and suggested that Mark Hylkema (an archaeologist for California State Parks) be consulted about possible resources that have been found but not recorded. No other responses have been received as of the date of the *Cultural Resources Report*. In addition, Bryan Largay of the Land Trust of Santa Cruz County has discussed the project with the Amah Mutsun Tribal Band, which oversees long term research plots on the property.

Field Survey

Field surveys were completed between February 23, 2016 and July 18, 2017. Survey coverage of each proposed trail route was completed by walking transects within a swath 100 feet wide when feasible. Trail routes located within existing roads were completed by walking transects within a swath 50 feet wide. The parking area was inspected by walking transects spaced no greater than 15 meters apart.

Of the 25 previously recorded sites, five sites that were within or in close proximity to the vicinity where the parking area and trails would occur were revisited by Tom Origer & Associates to confirm the findings of the previous studies. No archaeological specimens were observed on four of these sites (P-44-000069, P-44-000070, P-44-000071, and P-44-000123). Various findings included cooking utensils, remnants of a stove, bricks, metal tools (i.e., axes, files), portions of pipelines, and glass fragments that are likely associated with the San Vicente Lumber Company and their operations at site P-44-000596 (Camp 3). The majority of the findings were observed in poor, rusted condition. A segment of the San Vicente Lumber Company Railroad grade was found that extends directly through Camp 3. This segment of the San Vicente Lumber Company Railroad grade is approximately 1 mile in length. Portions of the grade have eroded and some are marked by newly growing trees, bush, and vines. It's probable that the grade was used by motor vehicles after removal of the railroad tracts.

A new site, Camp ZZZ, was observed during the field studies. Historic-era specimens (i.e., glass fragments, ceramic fragments, metal cooking pots, pipe fragments, bed frame, and possible fence posts) were sparsely scattered throughout the Camp ZZZ site. The bed frame was in a poor, rusted condition and was found mangled among three trees. Some of the cooking utensils were observed in poor, rusted

condition. Other isolated artifacts (a probable vehicle fender, two fairly rusted historic era beer cans) were also observed as being previously found and piled together, as well as a historic era bottle fragment. These artifacts were documented, but none met the met criteria for inclusion on the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP). Therefore, implementation of the project would not affect a known archaeological resource.

Because multiple cultural resources have been identified within 0.5 miles of the project area and because the precise location of each trail has not yet been determined, there remains a possibility that unrecorded cultural resources are present, including the potential for those buried beneath the ground surface. Such resources could be exposed during project construction. Therefore, implementation of the project could result in a potentially significant impact to undocumented archaeological resources.

Mitigation Measure CUL-1

The following text shall be clearly identified on all grading plans and construction drawings: *Pursuant to sections 16.40.040 (Site Discovered During Excavation or Development) of the Santa Cruz County Code, if archaeological resources are uncovered during construction, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.*

Mitigation Measure CUL-2

Implement the following CR construction protocols from the San Vicente Redwoods Public Access Plan:

Construction Protocol CR-1.1. Prior to the start of construction, all construction personnel shall be educated on the identification and treatment of prehistoric and/or historic artifacts that may be discovered by a qualified, County-approved archaeologist who meets the Secretary of Interior standards or a registered, County-approved forester who has successfully completed the CAL FIRE archaeology program.

Construction Protocol CR-1.2. If ground disturbing activity takes place and possible artifacts are discovered, then all construction activities within a 50-foot radius of the find shall be halted immediately and a qualified, County-approved archaeologist who meets the Secretary of Interior standards (including CAL FIRE archaeologists) shall be consulted to determine whether the resource requires further study. (Note, it is CAL FIRE policy that registered professional "foresters" do not perform significance evaluations of cultural resources). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps). Any previously undiscovered resources found during construction activities shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of the CEQA criteria by a qualified archaeologist. If the resource is determined significant under CEQA, the qualified archaeologist shall prepare and

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analyses; prepare a comprehensive report complete with methods, results, and recommendations; and provide for the permanent curation of the recovered resources. The report shall be submitted to the County of Santa Cruz, Northwest Information Center, and State Historic Preservation Office, if required.

Construction Protocol CR-1.3. When trail building in the vicinity of sites P-44-000069, P-44-000070, P-44-000071, P-44-000123, and P-44-000596 as identified in the *Cultural Resources Study* dated October 2017 and on file with the County, a County-approved, qualified archaeologist who meets the Secretary of the Interior standards or a County-approved, registered forester who has successfully completed the CAL FIRE archaeology program shall be present during the initial ground-disturbing phase of construction. Selected portions of trail routes may be in close proximity to sites P-44-000069, P-44-000070, P-44-000071, P-44-000123, and P-44-000596, and monitoring at locations shown on Figure 3 and Figure 4 of the *Cultural Resources Study* is required. If archaeological specimens are discovered, a qualified archaeologist who meets the Secretary of the Interior standards should evaluate their significance.

Construction Protocol CR-1.4. For sites P-44-000596 and Camp ZZZ, a signage program at all entrances shall be developed by the applicant prior to final inspection at the entrances to the property. Signs shall include a brief description of the history of San Vicente Railroad, including various camps throughout the area, a discussion of the historic value of the sites, and the citation of the regulatory codes that protect artifacts. The signage shall also include the requirement to stay on trails.

Construction Protocol CR-1.5. If a trail is planned at site P-44-000596, the trail shall be constructed within the old railroad grade wherever possible because no trace of the railroad line, other than the grade is evident. If the trail is planned to be built outside the railroad grade where past land uses have disturbed the ground surface, construction of the trail is acceptable with the provision that any surface artifacts are avoided and ground disturbance is kept to a minimum. Portions of known railroad grade segments are depicted in Figures 5a and 5b of the *Cultural Resources Study*.

Construction Protocol CR-1.6. If a trail is planned at the Camp ZZZ site to follow the alignment of the existing gravel road, it is acceptable for the trail to follow within the road route because there is no trace of historic-period specimens evident within this alignment.

Level of Impact after Implementation of Mitigation Measures

The above mitigation measures require that trails be aligned to avoid known historic sites and for work to cease immediately if any artifact is found and that the proper authorities be notified. Implementation of these measures would reduce potential impacts to cultural resources to a less-than-significant level.

3. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Discussion: Similar to the discussion under E.2 above, although records search and field survey did not identify the presence of human remains within the project area, because other prehistoric resources have been identified within 0.5 miles of the project area, project construction has the potential to uncover previously undocumented human remains. Mitigation measures CUL-3 and CUL-4 address the finding of human remains.

Mitigation Measure CUL-3

The following text shall be clearly identified on all grading plans and construction drawings: *Pursuant to sections 16.40.040 (Site Discovered During Excavation or Development) of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible person shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archaeological report shall be prepared and representatives of the local Native California Indian groups shall be contacted.* If it is determined that the remains are Native American, the Native American Heritage Commission will be notified as required by law. The Commission will designate a Most Likely Descendant who will be authorized to provide recommendations for management of the Native American human remains. Pursuant to Public Resources Code section 5097, the descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. *Disturbance shall not resume until the significance of the archaeological resource is determined and appropriate mitigations to preserve the resource on the site are established.*

Mitigation Measure CUL-4

Implement the following Cultural Resources (CR) construction protocol from the San Vicente Public Access Plan:

Construction Protocol CR-1.7. The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5 and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be "most likely descended" from the deceased Native American. The most likely descendent would then make recommendations regarding the treatment of the remains with appropriate dignity.

Level of Impact after Implementation of Mitigation Measures

The above mitigation measures require work to cease immediately if any artifact or human remains are found and that the proper authorities be notified. Implementation of these measures would reduce potential impacts to cultural resources to a less-than-significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

F. ENERGY

Would the project:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Discussion: The project, like all development, would be responsible for an incremental increase in the consumption of energy resources during site grading and construction due to onsite construction equipment, materials processing, and potential traffic delays. These impacts would occur at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, all project construction equipment would be required to comply with the California Air Resources Board (CARB) emissions requirements for construction equipment, which includes measures to reduce fuel-consumption, such as imposing limits on idling and requiring older engines and equipment to be retired, replaced, or repowered. As a result, impacts associated with the small temporary increase in consumption of fuel during construction are expected to be less than significant.

Once constructed, consumption of energy will be minimal, as the project involves a passive trail system. Energy use will be minimal, and no impacts are expected from project implementation. Therefore, the project will not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts will be less than significant.

2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion: The Association of Monterey Bay Area Governments (AMBAG) 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) recommends policies that achieve statewide goals established by CARB, the California Transportation Plan 2040, and other transportation-related policies and state senate bills. The SCS element of the MTP targets transportation-related GHG emissions in particular, which can also serve to address energy use by coordinating land use and transportation planning decisions to create a more energy efficient transportation system.

The Santa Cruz County Regional Transportation Commission (SCCRTC) prepares a County-specific regional transportation plan (RTP) in conformance with the latest AMBAG MTP/SCS. The 2040 RTP establishes targets to implement statewide policies at the local level, such as reducing vehicle miles traveled and improving speed consistency to reduce fuel consumption.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

In 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) is focused on reducing the emission of greenhouse gases, which is dependent on increasing energy efficiency and the use of renewable energy. The strategy intends to reduce energy consumption and greenhouse gas emissions by implementing a number of measures such as reducing vehicle miles traveled through County and regional long-range planning efforts, increasing energy efficiency in new and existing buildings and facilities, increasing local renewable energy generation, improving the Green Building Program by exceeding minimum state standards, reducing energy use for water supply through water conservation strategies, and providing infrastructure to support zero and low emission vehicles that reduce gasoline and diesel consumption, such as plug in electric and hybrid plug in vehicles that reduce.

In addition, the Santa Cruz County General Plan has historically placed a priority on "smart growth" by focusing growth in the urban areas through the creation and maintenance of an urban services line. Objective 2.1 directs most residential development to the urban areas, limits growth, supports compact development, and helps reduce sprawl. The Circulation Element of the General Plan further establishes a more efficient transportation system through goals that promote the wise use of energy resources, reduce vehicle miles traveled, and enhance transit and active transportation options.

The project will be consistent with the AMBAG 2040 MTP/SCS and the SCCRTC 2040 RTP. The project would also be required to comply with the Santa Cruz County General Plan and any implemented policies and programs established through the CAS. Therefore, the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

G. GEOLOGY AND SOILS

Would the project:

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1.	*Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*				
	A. *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 Division of Mines and Geology Special Publication 42.*	☐	☐	☒	☐
	B. *Strong seismic ground shaking?*	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
C. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
D. Landslides?	☐	☐	☒	☐

***Discussion (A through D)*:** The project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001). However, due to the large nature of the project site (main tract: 8,160 acres and Laguna Tract: 373 acres) portions of the project site are within varying distances to nearby faults. For context, the distances to the nearby faults are described in relationship to the parking area. In general, the parking area is located approximately 9 miles southwest of the San Andreas fault zone, approximately 3 miles southwest of the Butano fault zone, approximately 1.5 miles south of the Zayante-Vergeles fault zone, and 7 miles northeast of the San Gregorio fault zone. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history.

A *Geotechnical Investigation* for the proposed parking area was prepared by Pacific Crest Engineering, Inc. in January 2018 (Attachment 7). Portions of the following discussion related to the proposed parking area are excerpted from or based upon the *Geotechnical Investigation.*

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a County or state mapped fault zone, therefore the potential for ground surface rupture is low. Specifically, the *Geotechnical Investigation* concludes that the potential for ground rupture due to fault offset is low. The project site is likely to be subject to strong seismic shaking during the life of the improvements. The project includes the development of a parking area and trails for recreational use and would not include any habitable structures. The temporary construction trailer and prefabricated restroom building would be designed in accordance with the California Building Code, which would reduce the hazards of seismic shaking and liquefaction to a less-than-significant level. In addition, the *Geotechnical Investigation* (Attachment 7) includes additional recommendations to reduce the potential for structural damage to an acceptable risk.

Any trails developed on the project site would have a maximum sustained trail grade that would generally be less than 10% with a preference of 5% to 7% where feasible, and the trail grade would not exceed 15% for a distance of more than 50 feet unless otherwise approved by the trail design professional. Based on the Santa Cruz County GIS Hazards Maps, the parking area is not mapped within a liquefaction hazard zone. There is no indication that landsliding is a significant hazard at this site (Cooper-Clark, 1975) and all trails would be constructed to prevent conditions that could promote landslides as discussed further in section G.3 below.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Discussion: Some potential for erosion exists during the construction phase of the project, however, this potential is minimal; as stated in discussion G.2, all trails would have a maximum sustained trail grade that is generally be less than 10%, preferably 5% to 7%, and the trail grade would not exceed 15% for a distance of more than 50 feet unless otherwise approved by the project design professional.

The proposed parking area location is situated on a northwest facing hillside with an average slope of 10%. Standard erosion controls are a required condition of the project. The soils at this location are well drained with moderate permeability. These soils are appropriate for storm water infiltration in vegetated basins. The runoff from the parking area location sheet flows from east to west in undeveloped forested areas to a swale downslope, which eventually feeds into Big Creek located approximately 1.5 miles downstream of the parking area location. There are two minor drainages that cross the parking area location with small drainage areas and poor definition. The proposed parking area would include seven vegetated basins to manage both concentrated storm water runoff from the proposed impervious areas and runoff from areas with existing drainage issues.

Onsite drainage improvements have been designed to infiltrate runoff from the proposed improvements. The drainage improvements have been designed to meet the requirements of the County of Santa Cruz Design Criteria (February 2017 edition). The post-development runoff rate would not exceed the pre-development site runoff rate, and therefore meets the requirements of the County of Santa Cruz and does not pose a risk of erosion of downstream drainage features. Prior to approval of a grading or building permit, the project must have an approved erosion control plan (per Santa Cruz County Code Section 16.22.060), which would specify detailed erosion and sedimentation control measures. The erosion control plan would include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion including erosion control blankets and straw wattles. Impacts from soil erosion or loss of topsoil would be considered less than significant. Furthermore, as listed in G.2, the proposed San Vicente Redwoods Public Access Plan includes detailed measures that would prevent accelerated erosion and ensure soil stability on the project site.

3. 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?	☐	☐	☒	☐

Discussion: Following a review of mapped information and a field visit to the site, there is no indication that the development site is subject to a significant potential for damage caused by any of these hazards. The *Geotechnical Investigation* (Attachment 7) confirmed that the parking area is located on a bedrock crest that is roughly parallel to Empire Grade.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

In addition, the proposed San Vicente Redwoods Public Access Plan includes trail design guidelines for new trails and for trails to be developed from existing timber harvest roads, which represent approximately 30% or 12 miles of the conceptual 38-mile trail alignment. New trails have specific guidelines for layout, orientation, switchbacks and climbing turns, and drainage. The proposed San Vicente Redwoods Public Access Plan also includes construction protocols and maintenance guidelines that would ensure that all trails are stable and secure to the degree feasible through erosion prevention. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed. Detailed trail design guidelines and construction protocols are provided in Chapter 7, Design and Maintenance Guidelines, of the proposed San Vicente Redwoods Public Access Plan. The following are selections of guidelines and construction protocols that would ensure trail stability through erosion prevention:

Trail Design Guidelines

Roads to be Maintained for Vehicles and used as Trails.

- Where existing roads will be used as trails and also maintained for limited vehicular use for property operations and maintenance.
- Improvements to existing roads shall be designed to minimize erosion and extend the life of the trails while avoiding disturbance of the surrounding landscape. Any drainage features shall be built for longevity and require minimal maintenance.

Roads to be Decommissioned and Converted into Trails.

- An historic railroad grade, which also served as a road historically, will be converted to use as a trail. Most of this landform is stable and should not be regraded.
- Existing culverts that are in good condition and adequately sized will be retained. Existing culverts in poor condition may be improved or replaced with hardened crossings.

New Trails.

- New routes may be created when existing routes are not able to provide desired connectivity or have drainage issues or other problems that make trail sustainability infeasible.
- The trail should be laid out and construction overseen by a qualified design professional with experience in backcountry trail management.
- The trail shall be laid out to conform to the natural terrain to create a visually pleasing alignment and engineered for resilience to discourage the establishment of unauthorized trails. The trail should have a curvilinear alignment that avoids long straight reaches. The alignment should incorporate natural terrain features (e.g., trees, rocks) to form required grade reversals, while minimizing tree removal and impacts to roots.
- The trail should avoid active unstable and other hazardous areas, sensitive plant and animal habitats, archaeological resources, steep side-slopes, and unstable watercourse crossings.
- Trails shall avoid fall line orientations. A fall line trail is a trail that drops directly down the hillside following the same path that water flows, thereby focusing water down the length. These routes are difficult, if not impossible, to drain, and often experience higher rates of

ongoing erosion. Instead, trails on slopes should follow a contour alignment. Retaining walls may be required where additional support is needed to ensure trail sustainability on steep slopes.

- As a general rule, the trail should have a grade no steeper than half the grade of the native hillside. For example, a trail crossing a 10% gradient hillside shall have a grade no steeper than 5%. The maximum sustained trail grade should generally be less than 10%, preferably 5% to 7%, and the trail grade should not exceed 15% for a distance of more than 50 feet unless otherwise approved by the project design professional. Trails steeper than 15% tend to have greater erosion problems and require more maintenance than trails less than 15%.
- Switchbacks and climbing turns should be constructed to reverse the direction of travel on hillsides and to gain elevation in a limited distance.
- Trails should be designed, constructed, and upgraded to cause minimal disruption of natural drainage patterns. As a general rule, runoff should not be allowed to concentrate from one catchment to another.
- Trail shall be drained with grade reversals that are incorporated into the trail at the time of construction in order to avoid concentrated water flow by creating a drainage dip in the trail.
- Grade reversals shall be installed at minimum spacing of 150 feet. Grade reversal location should be identified and flagged in advance of trail construction by the project design professional.
- Trail routes should avoid watercourse crossings where channel gradient is steep, as well as at deeply entrenched streams with potential unstable streamside slopes. Routes preferably should be located such that drainage areas are crossed high in their watershed locations where streams are less defined in order to avoid stream disturbance.

Biological Resources (BR) Construction Protocols

Construction Protocol BR-1.5. Trail construction shall incorporate the best available technology and industry-standard BMPs to minimize the potential for detrimental impacts such as erosion or sedimentation and to minimize the need for future maintenance.

Construction Protocol BR-1.9. Trails constructed near wetlands or streams shall be designed to minimize changes to pre-project hydrology. Avoid erosion or sedimentation by installing BMPs (e.g., silt fencing, wattles, sterile straw, hydromulch, geotextile fabrics, sediment traps, drainage swales, or sand bag dikes) around wetlands and streams. All materials shall be certified weed-free and must be constructed of natural materials. No plastic monofilament netting may be used. The exact location and configuration of BMPs shall be determined by the contractor based on specific site conditions and the type of work being conducted. BMPs shall remain in place until all disturbed ground has been stabilized either through compaction or re-vegetation.

Construction Protocol BR-1.10. Equipment used for building new trails should generally have tread width of 48 inches or less and mass less than 10,000 pounds.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Construction Protocol BR-1.13. All disturbed ground shall be stabilized concurrent with or immediately following construction. Stabilization methods may include: compacting the soil (for trail surfaces only), covering disturbed soils with duff and leaf litter as well as branches removed for construction of trails, revegetation using appropriate native plant species, or use of other standard erosion control measures such as weed-free straw or hydromulch. If disturbed areas are to be revegetated, only native plants appropriate for the habitat shall be used per Construction Protocol BR-1.6. If other erosion control materials are to be used, they shall be certified weed-free and as otherwise specified in Construction Protocol BR-1.9.

Trail Maintenance Guidelines

The first step in trail maintenance and a key component of the required adaptive management approach to minimize impacts is to inspect all trails on a routine basis to identify and document current conditions, erosion and incision, evidence of sediment deposit in streams or wetlands, unauthorized trails, and any problem areas in need of improvement. Maintenance Guidelines would address typical problems such as infilled and nonfunctioning drainage features, wet and muddy trail segments, failed trail segments, plugged stream crossings, downed trees, informal social trails, rutted/rilled trail segments, and areas of trail widening.

- Work plans should be prepared to plan for and schedule any needed upgrades. It may be necessary to prioritize repairs based on available funding or severity of the problem. Upgrades should be completed prior to October 15th each year.
- Remove outside berms and out-slope tread to drain.
- Remove cut-bank slough from the trail tread.
- Remove accumulated debris from all trail drainage features.
- Enlarge grade reversals that appear undersized and at risk for failure.
- Install additional drainage grade reversals in areas where runoff is concentrated.
- Clean infilled ditches.
- Clean culverts of debris.
- Replace failing culverts with alternative improvements such as hardened crossings.
- Inspect and repair puncheons and bridges.

4.	*Be located on expansive soil, as defined in section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?*	☐	☐	☐	☒

Discussion: The effects of expansive soils can damage foundations of above-ground structures, paved roads and streets, and concrete slabs. However, since the project proposes trails and other trail features including associated amenities and not construction of habitable facilities, there would be no substantial risks to life or property, and there would be no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. *Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*	☐	☐	☐	☒

Discussion: The project includes a single restroom building with two vault toilets. Vault toilets are a common backcountry solution for sites with drivable road access, but without running water. Waste is held in an underground vault or tank and would not need a septic tank, connections to existing wastewater systems, or alternative systems. Waste is pumped out at regular intervals by a pump truck and removed from the project site for disposal at an approved facility. Therefore, there would be no impact.

6. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*	☐	☐	☐	☒

Discussion: As part of the *Cultural Resources Study* prepared for the project as discussed in E.2, a paleontological records search was requested from the University of California Museum of Paleontology at the University of California, Berkeley. The paleontological records search indicated that there are no significant localities within or adjacent to the project site. The nearest vertebrate locality is located more than three miles to the northeast of the study area.

H. GREENHOUSE GAS EMISSIONS

Would the project:

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*	☐	☐	☒	☐

Discussion: Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas (GHG) emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Construction

Construction-phase emissions would be nominal, as the project would not require intensive construction equipment. Furthermore, the project does not anticipate an intensive construction schedule. Most trail construction would occur by hand with limited use of heavy machinery or vehicles, and heavy machinery or vehicle use would be limited to areas with existing vehicular access (e.g., on former logging roads). Likewise, the construction of the parking area would entail the use of standard construction machinery and equipment. Overall, the project would result in a small temporary increase in GHG emissions during construction, and impacts would be less than significant.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Operation

The County Board of Supervisors approved the County of Santa Cruz CAS on February 26, 2013. No thresholds of significance for project generated GHG emissions were included in the CAS. Instead, the County is looking to the MBARD for guidance in this area. The MBARD has not yet adopted recommended thresholds of significance for land use projects within the NCCAB. However, on February 20, 2013, the MBUAPCD Board of Directors received an informational report on the status of developing GHG emissions thresholds for evaluating projects under CEQA. Although no action was taken, staff recommended further review of a GHG threshold of 2,000 metric tons of CO_2 equivalent ($MTCO_2e$) per year for land use projects or compliance with an adopted GHG reduction plan/climate action plan.

Operational emissions associated with the project include GHGs from mobile sources (emissions from vehicles), area sources (consumer products, painting), and waste generation. Because the project would increase vehicle trips to the project site by up to 420 average daily trips on the weekends and up to 90 average daily trips on the weekdays, operational GHG emissions were modeled using CalEEMod 2016.3.2. As shown in Table 7 below, the project would generate approximately 113 $MTCO_2e$ per year. This is far below the suggested MBARD threshold of 2,000 metric tons per year. Impacts associated with the increase in operational greenhouse gas emissions are expected to be less than significant.

Table 7: Operation-Phase GHG Emissions

Source	* Annual GHG ($MTCO_2e$/Year)
Area	<1
Mobile	113
Waste Generation	<1
Total	113

Notes: $MTCO_2e$ = metric ton of carbon dioxide equivalent
Source: CalEEMod, Version 2016.3.2.

2.	*Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*	☐	☐	☒	☐

Discussion: Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, AMBAG's MTP/SCS, and Santa Cruz County's CAS.

CARB Scoping Plan

In accordance with Assembly Bill (AB) 32, CARB developed the 2008 Scoping Plan to outline the state's strategy established by AB 32, which is to return the State's GHG emissions inventory to 1990 levels by year 2020. In September 2016, Senate Bill (SB) 32 was signed into law, requiring the State's GHG emissions to return to 40% below 1990 levels by 2030. Executive Order B-30-15 and SB 32 require CARB to prepare another update to the Scoping Plan to address the 2030 target for the State. On December 14, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update to address the

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new interim GHG emissions target under SB 32. The CARB 2017 Scoping Plan is applicable to State agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the 2017 Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

The project would be constructed to achieve the standards in effect at the time of development and would not conflict with Statewide programs adopted for the purpose of reducing GHG emissions. Therefore, impact would be less than significant.

Santa Cruz County's Metropolitan Transportation Plan

In addition to AB 32, the California legislature passed SB 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare an MTP/SCS in their regional transportation plans to achieve the per capita GHG reduction targets. AMBAG adopted the 2040 MTP/SCS on June 13, 2018. The project would provide recreational opportunities to the community. Therefore, the project would not interfere with AMBAG's ability to implement the regional strategies outlined in the MTP/SCS, and the impact is less than significant.

Santa Cruz County Climate Action Strategy Consistency

The CAS serves as a framework for the actions that the County of Santa Cruz and the unincorporated community can take to both lessen their contribution to climate change and prepare for the impacts when they do occur. In addition to guiding County government actions, the CAS is intended to inspire non-government community organizations in their efforts to address climate change, and to identify opportunities for partnerships with other government agencies and community groups. The project would align with the goals of the CAS. Namely, the project is not a major source of GHG emissions, and would generate nominal GHG emissions from energy use, transportation, waste generation, water use, and area sources.

In addition, the proposed San Vicente Redwoods Public Access Plan includes the following goals, policies and that are consistent with the main goals of the CAS:

Goal Recreation 1. Provide opportunities for non-motorized recreation.

- **Policy Recreation 1.1.** Open trails within San Vicente Redwoods for low impact recreation.
- **Policy Recreation 1.2.** Allow hiking on designated trails.
- **Policy Recreation 1.3.** Allow bicycle use on designated trails.
- **Policy Recreation 1.5.** Allow equestrian use on designated trails.

Goal Recreation 4. Promote regional trail connections.

- **Policy Recreation 4.1.** Designate a Skyline-to-Sea Trail corridor through San Vicente Redwoods, extending from Empire Grade to the Cotoni-Coast Dairies property.
- **Policy Recreation 4.2.** Coordinate with adjacent open space managers to facilitate regional trail connections.
- **Policy Recreation 4.3.** Provide additional trail connections to other public open space lands where feasible.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Goal Recreation 5. Provide amenities that support non-motorized recreation activities.

- **Policy Recreation 5.3.** Provide amenities at the parking area; amenities may include signage, benches, trash receptacles, restrooms, and bicycle parking.

Goal Education 2. Utilize research as a management tool.

- **Policy Education 2.1.** Encourage research projects that will inform management of public access, such as studies that monitor environmental impacts of visitors on the reserves.

In addition, of the proposed 38 miles of trails, approximately 30% or 12 miles would be on existing timber harvest roads; thus, reducing the amount of new construction. The proposed San Vicente Redwoods Public Access Plan includes trail design guidelines for layout, orientation, switchbacks and climbing turns, and drainage, that would ensure that the all trails are sustainable and stable to the degree feasible. The proposed San Vicente Redwoods Public Access Plan also includes construction protocols and maintenance guidelines to ensure sustainable trails. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed. Detailed guidelines (design and maintenance) and construction protocol are provided in the proposed San Vicente Redwoods Public Access Plan.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1.	*Create a significant hazard to the public or the environment as a result of the routine transport, use, or disposal of hazardous materials?*	☐	☐	☒	☐

Discussion: The project would not involve the route transport or disposal of hazardous materials. Small amounts of potentially hazardous materials associated with mechanical equipment would be used during construction of the parking area. However, these would not be a large enough quantity, due to the small scale of the project, to create a hazard to the public or the environment. Standard precautions and BMPs would be used to prevent spills and would minimize exposure of hazardous materials to people and to the environment. Project operation would involve the use of small amounts of hazardous materials for cleaning and maintenance purposes at the parking area. These potentially hazardous materials would not be of a type or be present in sufficient quantities to pose a significant hazard to public health and safety or the environment. Furthermore, such substances would be used, transported, stored, and disposed of in accordance with applicable federal, State, and local laws, policies, and regulations. Therefore, the project would not create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create a hazardous condition that would lead to the reasonably foreseeable upset that could release hazardous materials into the environment. The impact would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*	☐	☐	☒	☐

Discussion: The project site does not contain any known hazardous materials spills or storage. As described above, the project would involve the routine usage of small amounts of hazardous materials during project construction and operation, but these materials would not be of a quantity or type to be susceptible to an accidental spill or release that would affect the environment or surrounding uses. In addition, the project would be required to comply with existing federal, State, and local regulations. The impact would be less than significant.

3. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	☐	☐	☐	☒

Discussion: As discussed in I.2 and I.3, the project would not manage, transport, or release hazardous emissions. There are no existing or proposed schools within one-quarter mile of the project site. No impact would occur.

4. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*	☐	☐	☐	☒

Discussion: The California State Department of Toxic-Substance Control (DTSC) EnviroStar database indicated that there are no cleanup sites on the project site. The closest facility is the Sunnyvale Nirop, Santa Cruz Facility located on 16020 Empire Grade with a "No further action as of 12/10/2009" clean-up status. Therefore, development of the project would not create a significant hazard to the public or to the environment by virtue of its location in proximity to a known hazardous materials site and no impact would occur.

5. *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 or excessive noise for people residing or working in the project area?*	☐	☐	☐	☒

Discussion: The project is not located within an airport land use plan or within two miles of a public airport or public use airport. Additionally, the project would not result in any additional people

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

residing or working in close proximity to an airport. Therefore, the project would not expose people to safety hazards from airports. No impact would occur.

6.	*Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	☐	☐	☐	☒

***Discussion*:** No new housing or facilities would be constructed such that the project would permanently impair implementation of or physically interfere with the County of Santa Cruz Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020). The project would include new gates and driveways that would facilitate emergency access to the site. CAL FIRE shall have access to the gates so that emergency personnel can respond to emergencies regardless of whether the gates are open or not. Therefore, no impacts to an adopted emergency response plan or evacuation plan would occur.

7.	*Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*	☐	☐	☒	☐

***Discussion*:** See discussion under Wildfire section T.2. Impacts would be less than significant.

J. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1.	*Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*	☐	☐	☒	☐

***Discussion*:** A *Drainage Analysis San Vicente Redwoods Staging Area* (Drainage Analysis) dated August 2018 was prepared for the project by Fall Creek Engineering, Inc. (Attachment 8).

Because the project would disturb one or more acres during construction, the project applicant would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Permit and submit Permit Registration Documents to the State Water Resources Control Board (SWRCB) prior to the start of construction. The Permit Registration Documents include a Notice of Intent and a site-specific construction Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would describe the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction.

The proposed San Vicente Redwoods Public Access Plan includes construction protocols and maintenance guidelines that would ensure that the parking area and proposed trails are stable and secure to the degree feasible through erosion prevention. In addition, the adaptive management strategies related to watershed protection of the proposed San Vicente Redwoods Public Access Plan described in section D.3 above (Biological Resources), would further ensure impacts would be less than significant. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed. Detailed

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

guidelines and construction protocols are provided in the proposed San Vicente Redwoods Public Access Plan. With implementation of the guidelines and construction protocols in the San Vicente Redwoods Public Access Plan, as well as BMPs identified in the SWPPP, any water quality impacts during construction would be less than significant.

At buildout the proposed staging would accommodate up to 90 vehicular parking spaces. Contaminants from automobiles could potentially occur in the parking area. The proposed parking area is generally flat and has an average slope of 10%. Requirements by the SWRCB also require the project applicant to prepare a construction SWPPP that includes post construction treatment measures aimed at minimizing storm water runoff. The proposed parking area would include seven vegetated basins to manage both concentrated storm water runoff from the proposed impervious areas and runoff from areas with existing drainage issues. Onsite drainage improvements have been designed to infiltrate runoff from the proposed improvements, thereby protecting groundwater quality. The drainage improvements have been designed to meet the requirements of the County of Santa Cruz Design Criteria. The post-development runoff rate would not exceed the pre-development site runoff rate, and therefore meets the requirements of the County of Santa Cruz and does not pose a risk of erosion of downstream drainage features.

The conceptual trail alignment would include crossings of ephemeral drainages and intermittent to perennial streams that may be considered jurisdictional by the USACE, RWQCB, and CDFW. As stated in section G.2 above (Geology and Soils), the proposed San Vicente Redwoods Public Access Plan includes trail design guidelines for new trails and for trails to be developed from existing timber harvest roads, which represent approximately 30% or 12 miles of the proposed 38 miles. New trails have specific guidelines for layout, orientation, switchbacks and climbing turns, and drainage to prevent accelerated erosion.

Potential siltation from the project would be addressed through implementation of these erosion control requirements, which comply with industry standard BMPs. No water quality standards or waste discharge requirements would be violated during construction or operation of the project. Impacts would be less than significant.

2. *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*	☐	☐	☒	☐

Discussion: The project would only use small amounts of water during construction for dust control and concrete work for the development of the parking area. During project operation, two 5,000-gallon fire storage water tanks filled from a water truck as required for fire protection services. No additional water use would be required for the project. The total impervious area created for the ODA-required parking and trail section and building pads for the restroom building and fire storage water tanks at the parking area would be 30,259 square feet (0.7 acres) as shown in Table 1 above (Background Information - Construction and Phasing). Therefore, implementation of the proposed San Vicente Redwoods Public Access Plan and construction and operation of the parking area to serve

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

trails on the project site would not place any substantial demands on groundwater. Impacts would be less than significant.

3.	*Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*				
	A. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
	B. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
	C. 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; or;	☐	☐	☐	☒
	D. impede or redirect flood flows?	☐	☐	☐	☒

Discussion:

Erosion

The proposed parking area would include seven vegetated basins to manage both concentrated storm water runoff from the proposed impervious areas and runoff from areas with existing drainage issues. Trails would include crossings of ephemeral drainages and intermittent to perennial streams that could be considered jurisdictional by the USACE, RWQCB, and CDFW. All proposed trails would be constructed to the standards outlined in the proposed San Vicente Redwoods Public Access Plan and would not substantially alter the existing drainage patterns in the area. The proposed San Vicente Redwoods Public Access Plan includes construction protocols Biological Resource (BR) BR-1.7 and BR-1.8.

Construction Protocol BR-1.7. Stream crossings should ideally be designed and constructed to freespan the channel and be anchored above the top of bank. Crossings of regulated streams that avoid work below the ordinary high-water mark do not require a permit from the USACE. When required, notify the CDFW and the Central Coast RWQCB of the crossing, even if located above the top of bank. If

the CDFW and/or RWQCB issue authorizations for such work, the measures included in any such authorizations shall be incorporated into the design.

Construction Protocol BR-1.8. Where wetlands or streams cannot be avoided, appropriate approvals from the USACE (for impacts to regulated wetlands or areas below the ordinary high-water mark of regulated streams) and/or the RWQCB and the CDFW (for impacts to regulated wetlands, riparian vegetation, or areas below the top of bank of regulated streams) shall be secured prior to initiating work in these areas. The measures included in any such authorizations shall be incorporated into the design.

Accordingly, the project would be consistent with Santa Cruz County Code section 7.79.070 (Storm Drain System and Channel Modification Prohibited), which states, "No person shall make any unpermitted alterations to drainage patterns or modifications to the storm drain system or any channel that is part of receiving waters of the county. No person shall deposit fill, debris, or other material in the storm drain system, a drainage channel, or on the banks of a drainage channel where it might enter the storm drain system or receiving waters and divert or impede flow."

An erosion control plan would also be required per section 16.22.060 (Erosion Control Plan) of the County Code.

The proposed San Vicente Redwoods Public Access Plan includes construction protocols and maintenance guidelines that would ensure that all proposed trails are stable and secure to the degree feasible through erosion prevention. Trails that do not meet these standards or comply with the protocols may be closed for public use until maintenance that brings the trail into compliance can be completed. Detailed guidelines and construction protocols are provided in the proposed San Vicente Redwoods Public Access Plan. Implementation of the proposed San Vicente Redwoods Public Access Plan would ensure that water quality impacts to the ephemeral drainages and intermittent to perennial streams would be less than significant.

Surface Water Runoff

The project would not substantially alter any existing drainage patterns on the site including the alteration of the course of a stream or river. All storm water drainage as a result of the project would be managed on site. Onsite drainage improvements have been designed to infiltrate runoff from the proposed improvements. The drainage improvements have been designed to meet the requirements of the County of Santa Cruz Design Criteria. The Drainage Analysis (Attachment 8) evaluated the stormwater runoff for retention of a 2-year, 2-hour storm, and detention of a 10-year, 15-minute storm event. For sizing of the proposed vegetated basins at the parking area, the Drainage Analysis applied the Runoff Retention by the Storage Percolation Method, as provided by the County. Each vegetated basin proposed at the site was sized for retention of a 2-year, 2-hour storm, and detention of a 10-year, 15-minute storm event. Furthermore, the site as a whole was reviewed to ensure that site runoff does not exceed the pre-development condition for a minimum 10-year, 15-minute storm event. Finally, the seven proposed vegetated basins at the parking area have all been over-sized and would accommodate larger storms than required by the County Design Criteria. Any overflow from the vegetated basins will sheetflow to natural, landscaped areas. This overflow conveyance via sheetflow will accommodate the 25-year storm as required by the County Design Criteria. The post-

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

development runoff rate would not exceed the pre-development site runoff rate, and therefore meets the requirements of the County of Santa Cruz and does not pose a risk of on-site or off-site flooding. Impacts would be less than significant. In addition, the adaptive management strategies related to watershed protection of the proposed San Vicente Redwoods Public Access Plan would further ensure impacts would be less than significant.

Capacity of Drainage Systems

All storm water drainage as a result of the project would be managed on site and would not exceed the capacity of any storm water drainage system. No impact would occur.

Flood Flows

The only structures that would be introduced at the proposed parking area include the restroom building on a 15-foot by 15-foot pad, a temporary construction trailer, and two 5,000-gallon fire storage water tanks. According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no portion of the parking area lies within a 100-year flood hazard area. Therefore, the project would not impede or redirect flood flows. No impact would occur.

4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

***Discussion*:** There are two primary types of tsunami vulnerability in Santa Cruz County. The first is a tsunami or distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz County. However, this type of tsunami would usually allow time for the Tsunami Warning System for the Pacific Ocean to warn threatened coastal areas in time for evacuation (County of Santa Cruz 2015).

The more vulnerable risk to the County of Santa Cruz is a tsunami generated as the result of an earthquake along one of the many earthquake faults in the region. Even a moderate earthquake could cause a local source tsunami from submarine landsliding in Monterey Bay. A local source tsunami generated by an earthquake on any of the faults affecting Santa Cruz County would arrive just minutes after the initial shock. The lack of warning time from such a nearby event would result in higher causalities than if it were a distant tsunami (County of Santa Cruz 2015).

The only structures that would be introduced at the proposed parking area include the restroom building, a temporary construction trailer, and two 5,000-gallon fire storage water tanks. The proposed parking area is located in the Santa Cruz Mountains at approximately 2,600 feet in elevation with no large bodies of water in the vicinity. Given this, a tsunami or seiche would not affect this area of the project site. The project geotechnical engineer did not identify mudflows as a risk for development in this area. The proposed improvements at the parking area would be located on an average slope of 10% and are, therefore, unlikely to become saturated in heavy rainfall.

The conceptual location of the proposed trail alignments are located approximately 1 mile inland at its closest point and 7 miles at it furthest point beyond the effects of a tsunami. The soil conditions

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

vary over the approximately 38 miles of trails, but due to the nature of multi-purpose trails they are unlikely to become saturated in heavy rainfall. In addition, no impact from a seiche or mudflow is anticipated. No impact would occur.

5. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*	☐	☐	☐	☒

Discussion: All County water agencies are experiencing a lack of sustainable water supply due to groundwater overdraft and diminished availability of streamflow. Because of this, coordinated water resource management has been of primary concern to the County and to the various water agencies. As required by state law, each of the County's water agencies serving more than 3,000 connections must update their Urban Water Management Plans (UWMPs) every five years, with the most recent updates completed in 2016.

County staff are working with the water agencies on various integrated regional water management programs to provide for sustainable water supply and protection of the environment. Effective water conservation programs have reduced overall water demand in the past 15 years, despite continuing growth. In August 2014, the Board of Supervisors and other agencies adopted the Santa Cruz Integrated Regional Water Management (IRWM) Plan Update 2014, which identifies various strategies and projects to address the current water resource challenges of the region. Other efforts underway or under consideration are stormwater management, groundwater recharge enhancement, increased wastewater reuse, and transfer of water among agencies to provide for more efficient and reliable use.

The County is also working closely with water agencies to implement the Sustainable Groundwater Management Act of 2014. By January 2020, Groundwater Sustainability Plans will be developed for two basins in Santa Cruz County that are designated as critically overdrafted—Santa Cruz Mid-County and Corralitos - Pajaro Valley. These plans will require management actions by all users of each basin to reduce pumping, develop supplemental supplies, and take management actions to achieve groundwater sustainability by 2040. A management plan for the Santa Margarita Basin will be completed by 2022, with sustainability to be achieved by 2042. However, since the project is a trail system and water runoff for the parking area will be treated on site, there will be no impact.

K. LAND USE AND PLANNING

Would the project:

1. *Physically divide an established community?*	☐	☐	☐	☒

Discussion: The project does not include any element that would physically divide an established community. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*	☐	☐	☒	☐

Discussion: The project does not conflict with any regulations or policies adopted for the purpose of avoiding or mitigating an environmental effect. While the project requires an exception to the County's riparian corridor standards for locations where the trail system crosses through riparian areas, General Plan/Local Coastal Program Policy 5.2.3 (Activities Within Riparian Corridors and Wetlands) states: "Development activities, land alterations and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception is granted per the Riparian Corridor and Wetlands Protection ordinance." Santa Cruz County Code Chapter 16.30 (Riparian Corridor and Wetlands Protection ordinance) allows the granting of riparian exceptions for projects located adjacent to, or within, a riparian corridor. The project is expected to be consistent with all other regulations in Santa Cruz County Code Title 16, Environmental and Resource Protection. In addition, the design and construction of the proposed stream crossings would utilize construction protocols and trail design guidelines as indicated in the San Vicente Redwoods Public Access Plan as well as BMPs to ensure that riparian resources would be protected and impacts to riparian areas would be minimized. Impacts would be considered less than significant.

L. MINERAL RESOURCES

Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: Four parcels (APNs 058-011-10, 058-022-04, 063-031-02 & 063-071-07) at the southeast corner of the main tract are designated as a mineral resource due to the former use of the area as the San Vicente quarry for the Davenport cement plant. The San Vicente quarry was the former quarrying site for the cement plant prior to use of the Bonny Doon quarry for limestone and shale in the production of cement. The San Vicente quarry was closed decades ago and is no longer in operation. No plans are in place for future use of the site for extraction of mineral resources.

The proposed trail system is located to the west of the parcels with the mineral resource designation and would not affect any existing or proposed quarrying operations. The location of the trail system would also not preclude future quarrying of the parcels designated as a mineral resource. For these reasons, the project will not result in the loss of a known mineral resource of value to the region and residents of the state. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. 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?	☐	☐	☐	☒

Discussion: Please see discussion in L.1 above.

M. NOISE

Would the project result in:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Discussion: Per Santa Cruz County General Plan Policy 6.9.1 (Land Use Compatibility Guidelines), development projects must conform to the land use compatibility guidelines specified in the General Plan. Projects that raise interior noise levels in the residential structures beyond 45 dB Ldn or exterior levels beyond 60 dB Ldn are not permitted.

Traffic Related Noise Impacts

The Transportation Study (Attachment 11) prepared for the project identified the existing, existing plus project, and net change in anticipated average daily vehicle trips along Empire Grade and Felton Empire Road. The traffic volumes of the project would result in a minimal increase in traffic noise levels along Empire Grade and Felton Empire Road. Project-related traffic noise impacts would be less than significant.

Parking Area

The proposed parking area would include up to 90 parking spaces at full buildout with public access limited to daylight hours only. Typical noise generated within a parking area could include occasional vehicle idling, car alarms, car beeps, car doors slamming, and conversation. As discussed in section Q.1 (Transportation and Traffic) below, the proposed parking area is anticipated to be most active on weekends (with up to 120 vehicles per day) and minimally active on weekdays (with up to 15 vehicles per day).

The parking area could generate noise levels up to 35 dBA L_{eq}, which would not exceed the County's noise standard. Therefore, overall, noise impacts from use of the proposed parking area would be less than significant, and no mitigation measures are necessary.

Multiple-Use Trail System

The multiple-use trail system would be for non-motorized recreational use during daytime hours. The location of the trails would be in the interior of the subject property and would be well separated from surrounding properties and sensitive receptors. Due to the non-motorized nature of the proposed use and the distance to surrounding properties, impacts would be less than significant.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Short Term Construction Impacts

Under the project, approximately 38 miles of trails would be constructed, as well as a parking area with associated amenities. Development of the project would occur over multiple phases as described in Table 4 (Construction and Operation Phasing). The parking area would be built out by the second phase, and construction of the trails would span all phases.

Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Each construction activity/phase involves the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. However, noise levels from construction activities are dominated by the loudest piece of construction equipment.

The construction of the parking area would occur over 500 feet from the closest residence, and trail construction would occur in remote areas of main tract and Laguna Tract, where there are no sensitive receptors identified. Most trail construction would occur by hand with limited use of heavy machinery or vehicles. The use of heavy machinery or vehicles would be limited to areas with existing vehicular access (e.g., on former logging roads), with the exception of the parking area, which would require the use of standard construction machinery and equipment.

The highest potential noise exposure would be from grading operations for the parking area. While the magnitude of the average noise levels may at times be slightly higher compared to the ambient noise environment, construction activities would fluctuate throughout the workday because equipment would not be in use at one location for an extended period of time.

Although construction activities would occur only during daytime hours, noise may be audible to nearby residents. However, noise exposure would be temporary. Noise from construction activity may also vary substantially on a day-to-day basis. Santa Cruz County Code Chapter 8.30 further limits any offensive noise (defined as over 75 dB at the boundary of the property generating the noise) to the hours between 8 AM to 10 PM. Noise is not expected to exceed this level, and impacts would be less than significant.

2.	*Generation of excessive groundborne vibration or groundborne noise levels?*	☐	☐	☒	☐

***Discussion*:** During construction, the use of grading equipment would potentially generate vibration in the project area. This impact would be temporary and intermittent during construction, with the closest residence being located at substantial distance from construction activities at over 500 feet from the property line at the proposed parking area. Project operations associated with the parking area and trails would not generate substantial levels of vibration since there are no significant vibration-generating sources as part of the project, which would be limited to passive recreation activities including hiking, walking, and horseback riding. Impacts would be less than significant.

3.	*For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public*	☐	☐	☒	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

***Discussion*:** The project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. Additionally, the project would not result in any additional people residing or working in close proximity to any airport. Therefore, the project would not expose people to excessive noise levels from airports. No impact would occur.

The project is not within two miles of a private airstrip. The closest private airstrip is located approximately 3.5 miles southeast of the subject property at 8647 Empire Grade. Additionally, the project would not result in any additional people residing or working in close proximity to a private airstrip. Therefore, the project would not expose residents or workers to excessive noise levels. Impacts would be less than significant.

N. POPULATION AND HOUSING

Would the project:

1.	*Induce substantial unplanned 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)?*	☐	☐	☐	☒

***Discussion*:** The project would not induce substantial unplanned population growth in an area because the project does not propose any new homes or business. The project includes the development and implementation of the San Vicente Redwoods Public Access Plan and would not induce population growth. No impact would occur as a result of project implementation.

2.	*Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒

***Discussion*:** The project site does not contain any existing housing; thus, no people or housing would be displaced. Therefore, implementation of the project would result in no impact related to displacement of existing population or housing units.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

O. PUBLIC SERVICES

Would the project:

1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:*

a.	*Fire protection?*	☐	☐	☒	☐
b.	*Police protection?*	☐	☐	☒	☐
c.	*Schools?*	☐	☐	☐	☒
d.	*Parks?*	☐	☐	☐	☒
e.	*Other public facilities; including the maintenance of roads?*	☐	☐	☒	☐

***Discussion (a through e)*:** The primary purpose of a public impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response times or other performance objectives. Generally, public service facilities need improvements (i.e., construction, renovation, or expansion) as demand for services increase. Increased demand is typically driven by increases in population. A project could have a significant environmental impact if it would exceed the ability of public service providers to adequately serve residents, thereby requiring construction of new facilities or modification of existing facilities. As discussed in section N, Population and Housing, above, the project would not result in a net increase of residents at the project site or elsewhere in the region because it does not propose housing and is not a major regional employer. Accordingly, the project would not warrant new construction of or expansion of an existing fire or police services, schools, or parks. While the project could represent an incremental contribution to the increase in services and road maintenance, the increase would be minimal and impacts associated with public services would be less than significant.

In addition, the proposed San Vicente Redwoods Public Access Plan includes the following goals and policies that are required to help reduce the demand to emergency service providers:

Goal Access 2. Manage Risk and Safety.

Policy Access 2.1. Provide patrol, monitoring, security, and signage for public safety and protection of resources.

Policy Access 2.2. Provide trail etiquette coaching to users and safety monitoring.

Policy Access 2.3. Work with partners to ensure adequate provision of emergency services.

Policy Access 2.4. Collect and maintain incident and accident reports and respond accordingly to reduce hazards.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Goal Access 4. Minimize the impact on the security, privacy, and rural character of the neighborhoods near the property, while achieving the other goals of the Plan.

Policy Access 4.2. Utilize signage and surveillance to minimize impacts to neighboring properties caused by trespassing or other activities.

In addition, the proposed San Vicente Redwoods Public Access Plan's adaptive management approach would further ensure the safety of users on the project site. A complete list of the adaptive management strategies is provided in the proposed San Vicente Redwoods Public Access Plan. However, the following specific strategies relate to wildland fires on the project site:

- Monitor and enforce rule violations; adjust engagement and enforcement effort
- Monitor closed areas for unauthorized access; adjust education and enforcement effort '
- Route trails around large blocks of the Restoration Reserves and Working Forest
- Track the satisfaction of working forest and restoration project managers; increase collaboration effort with partners as needed
- Close the property on 'red flag' days of exceptionally high fire risk and maintain a network of fire-fighting water tanks
- Track unauthorized visitors on 'red flag day' fire hazard days; adjust patrol effort, engagement and enforcement and monitor and maintain tanks to ensure they are full and in good condition

Impacts would be considered less than significant.

P. RECREATION

Would the project:

1. *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?*	☐	☐	☐	☒

Discussion: The project is a recreational project that includes the development of multi-use trails and a parking area with associated amenities that support recreational uses. The project would increase the quality of recreational options in the area, and thus would not result in the physical deterioration of or require the expansion of an existing park or recreational facility nor would it require the addition of new parks in Santa Cruz County or the surrounding area. No impacts would occur from project implementation.

2. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*	☐	☐	☒	☐

Discussion: As described in P.1, the project is a recreational project that includes the development of multi-use trails and a parking area with associated amenities that support recreational uses. There

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

would be no new employment opportunities or residential land uses that would increase demand for recreational facilities. The construction of recreational facilities and improvements has been evaluated through this Initial Study. Impacts to recreational facilities would be less than significant.

Q. TRANSPORTATION

Would the project:

1.	*Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*	☐	☐	☒	☐

Discussion: A traffic analysis was prepared for the project by Mott MacDonald, dated September 20, 2017 (Attachment 11). Due to the remoteness of the parking area and the limited street network in the vicinity of the parking area, the traffic analysis evaluated conditions at two study roadway segments (Empire Grade north of Pine Flat Road and Felton Empire Road east of Empire Grade). The traffic analysis describes the level of service (LOS), which is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. General Plan Policy 3.12.1 (Level of Service [LOS] Policy) uses this ranking system. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the level of service designation. The traffic analysis is based on the *2010 Highway Capacity Manual* methodologies, which is the calculation method identified in General Plan Policy 3.12.2 (Level of Service [LOS] Policy). However, to be conservative, the level of service threshold volumes have been reduced 50% (Empire Grade) and 75% (Felton Empire Road) to better reflect the mountainous terrain traversed by both roadways.

The traffic volumes on Empire Grade used in this analysis were collected in June 2016 (described below), presumably a high-volume month for project traffic due to the consistently good weather during that time of the year. However, the parking area is located opposite the Crest Ranch Christmas Tree Farm, which has its driveway approximately 800 feet north of the exit driveway for the parking area. Visitor activity as Crest Ranch Christmas Tree Farm causes traffic volumes on Empire Grade to increase between roughly Thanksgiving Day and Christmas Day. However, activity levels at the parking areas would be lower during this period, due to colder weather and possible rain. Therefore, the application of the June traffic counts is appropriate.

The traffic analysis included an evaluation of the following scenarios, which are summarized below:

- Existing Conditions
- Existing Plus Project Conditions
- Cumulative without Project Conditions
- Cumulative with Project Conditions

<u>Existing Conditions:</u>

New roadway segment counts were collected for seven consecutive days on Empire Grade near the parking area driveways in June 2016 (Monday, June 20 through Sunday, June 26, 2016) and on Felton

Empire Road just east of Empire Grade in July and August 2017 (Thursday, July 27 through Wednesday, August 2, 2017) – these counts can be found in Appendix B of the traffic analysis included as Attachment 11 of this Initial Study. These volumes were averaged together to derive an average daily traffic (ADT) for Empire Grade and Felton Empire Road in the project area as follows:

- ADT volumes on Empire Grade are 550 vehicles per day, which corresponds with LOS A. On Saturdays, ADT volumes are 630 vehicles per day, also LOS A.
- ADT volumes on Felton Empire Road are 2,350 vehicles per day, or LOS C. On Saturdays, ADT volumes are 2,340 vehicles per day, also LOS C.

Existing Plus Project Conditions:

Trip Generation. The trip generation and hourly traffic levels for the trailhead estimates are based on *Projected Visitor Counts and Parking Needs,* prepared by PlaceWorks dated January 12, 2016 (Attachment 10). In addition, Mott MacDonald also compared visitation estimates with existing visitation at the Twin Gates trailhead (Appendix B of Attachment 11). The project is estimated to attract approximately eight vehicles/day (initial) and 30 vehicles/day (future) on an average weekday during the year. Higher activity levels are anticipated on weekends during the spring, summer and fall months with as many as 36 vehicles/day (initial) and 140 vehicles/day (future). These vehicle rates assume that a planned future connection of the future trail system on the site to the Cotoni-Coast Dairies properties near Davenport would reduce the overall percentage of visitors that use the Empire Grade staging to access the overall trailhead site in the future.

Trip Distribution. The traffic analysis estimated that 10% of the project traffic would travel to/from the north of the site and 90% would travel to/from the south. The Existing Plus Project condition volumes are as follows:

- The ADT on Empire Grade is 566 (initial) and 610 (future) vehicles per day, which corresponds with LOS A. On Saturdays, ADT volumes are to 694 (initial) and 910 (future) vehicles per day, also LOS A.
- The ADT on Felton Empire Road is 2,358 (initial) and 2,380 (future) vehicles per day, which corresponds with LOS C. On Saturdays, ADT volumes are to 2,372 (initial) and 2,480 (future) vehicles per day, also LOS C.

The level of service at both study roadways remains the same as Existing Conditions and Existing Plus Project Conditions. As the Santa Cruz County level of service standard is LOS C, operations on Empire Grade and Felton Empire Road would continue to be acceptable.

Cumulative without Project and Cumulative Plus Project Conditions:

Derivation of Cumulative Traffic Volumes. Due to a lack of future traffic volume projections for Empire Grade near the parking area and insufficient historical traffic volumes to derive a historical growth rate, an assumed growth rate of 0.5% per year for 20 years – an overall growth rate of 10% – was applied to the existing volumes on Empire Grade and Felton Empire Road to approximate Cumulative without Project condition volumes. This level of growth is reflective of the rural nature of the surrounding area and the anticipated very low level of potential future development in the

study area. It is also slightly higher than the projected yearly population growth projection (0.42% per year between 2010 and 2035) for unincorporated Santa Cruz County forecasted by AMBAG in its *2014 Regional Growth Forecast,* which was adopted on June 11, 2014. AMBAG adopted an updated *Regional Growth Forecast* in 2018 with a slower rate of projected population growth than the 2014 population growth forecast. Due to a lower rate of population growth in the updated 2018 AMBAG *Regional Growth Forecast*, the cumulative traffic volumes in the traffic analysis (which were based on the higher 2014 AMBAG growth rates) are adequate for traffic analysis purposes through 2040, as noted in a traffic update memo prepared on January 18, 2019 (Attachment 11).

Trip Distribution. The traffic analysis estimated that 10% of the project traffic would travel to/from the north of the site and 90% would travel to/from the south.

The Cumulative without Project condition volumes are as follows:

- The ADT on Empire Grade is 605 vehicles per day, which corresponds with LOS A. On Saturdays, ADT volumes are to 693 vehicles per day, also LOS A.
- The ADT on Felton Empire Road is 2,585 vehicles per day, which corresponds with LOS C. On Saturdays, ADT volumes are to 2,574 vehicles per day, also LOS C.

The Cumulative Plus Project condition volumes are as follows:

- The ADT on Empire Grade is 621 (initial) and 665 (future) vehicles per day, which corresponds with LOS A. On Saturdays, ADT volumes are to 757 (initial) and 973 (future) vehicles per day, also LOS A.
- The ADT on Felton Empire Road is 2,593 (initial) and 2,615 (future) vehicles per day, which corresponds with LOS C. On Saturdays, ADT volumes are to 2,610 (initial) and 2,714 (future) vehicles per day, also LOS C.

The LOS at both study roadways remains the same as Existing Conditions and Cumulative without Project Conditions and Cumulative Plus Project Conditions. As the Santa Cruz County LOS standard objective is LOS C, operations on Empire Grade and Felton Empire Road would continue to be acceptable.

Construction Trips

Temporary construction trips would be significantly less than those of the project, which would not exceed the County level of standards as described above under existing and future conditions.

Alternative Modes of Transportation

Due to the rural setting of the project and the relative remoteness of the area from major population centers, few pedestrians are anticipated to walk to and from the parking area along the county roadway network. Pedestrians that visit the trailhead are likely to be residents that live in the area. Additionally, few bicyclists are anticipated to travel on the county road network to the parking area. The Santa Cruz Metropolitan Transit District does not provide services to the project site. Therefore, the project would not impede or conflict with any plan, ordinance or policy establishing measures of

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

effectiveness for the performance of the pedestrian and bicycle circulation systems in Santa Cruz County, and impacts would be less than significant.

2.	*Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1) (Vehicle Miles Traveled [VMT])?*	☐	☐	☒	☐

Discussion: In response to the passage of Senate Bill 743 in 2013 and other climate change strategies, the Governor's Office of Planning and Research amended the CEQA Guidelines to replace LOS with VMT as the measurement for traffic impacts. New Section 15064.3 – Determining the Significance of Transportation Impacts was added to the Guidelines. Subsection (c) Applicability allows jurisdictions until July 1, 2020 to implement the VMT provisions. Santa Cruz County is currently evaluating methodologies for implementing a VMT methodology prior to that date. See discussion under question Q-1 for an evaluation of traffic impacts.

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

***Discussion*:**

Driveways

The project would include a one-way vehicle entry point and a one-way vehicle exit point off Empire Grade where there is already an access point to the project site. The parking area entry and exit are a minimum of 14 feet wide – more than adequate for one-way driveways. The two driveways are located on a continuously straight segment of Empire Grade. There is a short vertical curve as one travels north on Empire Grade between the driveways, such that the elevation of the exit driveway is below that of the entry driveway. The entry and exit driveway approaches are flared out at their intersections with Empire Grade, which will allow for left and right turning vehicles out of the exit driveway to turn onto Empire Grade independently of each other. They also allow vehicles pulling trailers (such as horse trailers) to turn onto Empire Grade without the trailers driving off of the pavement.

Sight Distance

Santa Cruz County standards require a minimum of 250 feet of sight distance on either side of a driveway.

Exit Driveway. Field measurements in June 2016 found that the amount of sight distance available at the exit driveway exceeds the county sight distance requirement in both directions of Empire Grade. Trees and utility poles would not obstruct sight lines at the exit driveway. No improvements are required.

The County standard (250 feet of sight distance) is based on a speed limit of 35 mph. However, as the speed limit on Empire Grade is 40 mph, the sight distance was also compared to the California Department of Transportation (Caltrans) sight distance requirements. For 40 mph, Caltrans requires

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a sight distance for private driveways of 300 feet. Field measurements in June 2016 found available sight distance to/from the north of over 500 feet, and available sight distance to/from the south of 440 feet. As both these measurements exceed 300 feet, there is adequate sight distance at the exit driveway.

Entry Driveway. At the entry driveway, no traffic would be exiting the driveway. Instead, vehicles would be turning off Empire Grade itself, either slowing as they are turning off of the roadway or stopping while awaiting an adequate gap in traffic to make their turn. Therefore, the critical sight distance is the view of slowing, stopped or turning downstream vehicles on Empire Grade at the entry driveway.

Field measurements in June 2016 found that the amount of sight distance at the entry driveway exceeds the county sight distance requirements in both directions of Empire Grade. Available sight distance is 385 feet to/from the north and over 400 feet to/from the south; therefore, available sight distance also exceeds Caltrans requirements. No improvements are required.

Internal Circulation

The internal driveways widen to 24 feet in the parking areas where two-way travel is allowed, which meets standards for parking lot aisles. As the entry roadway, exit roadway, and some of the parking aisles only allow one-way traffic, appropriate signs that direct the one-way flow of traffic and clearly state do-not-enter signs would be placed throughout the parking area. Similar signs would also be located at the entry and exit driveways, in locations that would not obstruct the available sight distance from Empire Grade. Signs directing visitors with horse trailers to the designated horse trailer parking area would be posted to help prevent visitors with horse trailers from mistakenly parking in either the general parking aisles or along the edge of the access roadway. Clear pathways from the parking area to the trails would be posted to channel trail users to a centralized access point, concentrating foot/bicycle/equestrian traffic in certain areas.

Furthermore, as stated in Q.1 above, the project would not create unacceptable levels of congestion that would impede the existing traffic on the roadway. For the reasons discussed above, the project would not include any on-site or off-site hazardous design feature such as sharp curves, nor would it increase incompatible uses on local roads (such as slow-moving farm equipment) to result in hazards. Accordingly, no impact would occur.

4. Result in inadequate emergency access? ☐ ☐ ☒ ☐

***Discussion*:** The project exceeds the Santa Cruz County standard of 250 feet of sight distance standards on either side of a driveway and would not introduce any hazards that would impede emergency vehicles. The parking area would be designed and constructed to meet all emergency vehicle turning standards and clear signage would mark these locations. The parking area and parking spaces would be surfaced with compacted aggregate base that would support emergency vehicles and facilitate ingress and egress. Existing access roads throughout the property are currently being maintained as part of the timber harvesting operations and overall management of the property, ensuring that emergency vehicles will be able to continue to access the property in case of an emergency. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

R. TRIBAL CULTURAL RESOURCES

1. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

A. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources Code section 5020.1(k), or*	☐	☒	☐	☐
B. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*	☐	☒	☐	☐

Discussion: AB 52 requires the CEQA lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project if the Tribe requests in writing, to be informed by the lead agency through formal notification of the projects in the area. Such consultation would be required before the determination of whether a negative declaration, mitigated negative declaration, or EIR is required. In addition, AB 52 includes time limits for certain responses regarding consultation. AB 52 also adds "tribal cultural resources" (TCR) to the specific cultural resources protected under CEQA. CEQA section 21084.3 has been added, which states that "public agencies shall, when feasible, avoid damaging effects to any tribal cultural resources." Information shared by tribes as a result of AB 52 consultation shall be documented in a confidential file, as necessary, and made part of a lead agencies administrative record. No California Native American tribes traditionally and culturally affiliated with the area of Santa Cruz County have requested consultation pursuant to Public Resources Code section 21080.3.1.

A TCR is defined under AB 52 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included or eligible for inclusion in the CRHR or included a local register of historical resources, or if the County of Santa Cruz, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR.

As discussed in section E, Cultural Resources, in discussion E.2, as part of the *Cultural Resources Study*, the NAHC, members of the Amah Mutsun Tribal Band, members of the Costanoan Ohlone Rumsen-

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Mutsen Tribe, members of the Indian Canyon Mutsun Band of Costanoan, members of the Muwekma Ohlone Indian Tribe of the SF Bay Area, members of the Trina Marine Ruano Family, Jakki Kehl, and Linda Yimane were contacted in writing. These letters serve as notification that work is being performed in the project area they may be interested in; however, they were not designed to comply with CEQA's requirements stemming from the passage of AB 52. The NAHC responded via email on December 15, 2015 and provided a list of contacts and their information. Patrick Orozco (from the Pajaro Valley Ohlone Indian Council) responded in late December via telephone and suggested that Mark Hylkema (an archaeologist for California State Parks) be consulted about possible resources that have been found but not recorded. No other responses have been received as of the date of the *Cultural Resources Report*.

As discussed under discussion E.2 and E.3, no known archaeological resources meeting the AB 52 definition of a TCR were observed on the project site. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce impacts to unknown archaeological resources and Mitigation Measures CUL-3 and CUL-4 would reduce impacts to unknown Native American remains (both of which could qualify as TCRs) to a less-than-significant level.

S. UTILITIES AND SERVICE SYSTEMS

Would the project:

1. *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*	☐	☐	☒	☐

***Discussion*:**

Water

The implementation of the proposed San Vicente Redwoods Public Access Plan and development of the proposed parking area with associated amenities including a restroom building with vault toilets that would be adequate to accommodate the project. No potable water is proposed, and there would be no water features other than two 5,000-gallon fire storage water tanks filled from a water truck. Impacts would be less than significant.

Wastewater

The project would not generate wastewater. All sewage produced on site would be pumped from the vault toilets by a licensed sewage disposal company and disposed of at an approved facility. Impacts would be less than significant.

Stormwater

All storm water drainage as a result of the project would be managed on site. The proposed parking area would include seven vegetated basins to manage and treat both concentrated storm water runoff from the proposed impervious areas and other surface runoff from the immediate area. The

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

implementation of the proposed trail system would not introduce any new impervious surfaces and drainage would flow to the vegetated areas adjacent to the trails on the project site. Therefore, implementation of the proposed San Vicente Redwoods Public Access Plan and construction and operation of the parking area to serve trails on the project site would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities that could cause significant environmental effects. Impacts would be less than significant.

Electric Power

Pacific Gas and Electric Company (PG&E) provides power to existing and new developments in the Santa Cruz County area. During construction, electricity would be wired to a construction trailer within the proposed parking area. Impacts are expected to be minimal.

Natural Gas

PG&E serves the urbanized portions of Santa Cruz County with natural gas. Permanent use of natural gas is not proposed for the project. No impacts are anticipated.

Telecommunications

The site would not be served by any permanent telecommunications facilities, and there would be no impact.

2. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*	☐	☐	☒	☐

***Discussion*:** The project would only use a limited amount of water for dust control and concrete work during construction of the parking area. During project operation, two 5,000-gallon fire storage water tanks would remain filled from a water truck as required for fire protection services. No additional water use would be required or utilized for the project. Therefore, implementation of the proposed San Vicente Redwoods Public Access Plan and construction and operation of the parking area to serve trails on the project site would not place any substantial demands on the water supply that serves the region. Impacts would be less than significant.

3. *Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*	☐	☐	☒	☐

***Discussion*:** See discussion in S.1, above. All sewage produced on site would be pumped from the vault toilets by a licensed sewage disposal company and disposed of at an approved facility. Impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

***Discussion*:** As a rural recreational use project would generate small amounts of waste. The project proposes up to four trash and recycling receptacles with an approximate 110-gallon capacity to hold two standard 55 gallon recycle-type bags to be located at the parking area. Trash and recycling would be routinely removed by the property manager. Any excavation needed for trail construction would be used on site and would not be disposed of in a landfill. Therefore, implementation of the proposed San Vicente Redwoods Public Access Plan and construction and operation of the parking area to serve trails on the project site would not generate an amount of solid waste that would cause landfills or transfer stations to exceed permitting capacity. Impacts would be less than significant.

5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

***Discussion*:** The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

T. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

Discussion: The project is located within a high fire hazard area as mapped by the California Department of Forestry and Fire Prevention. However, the project would not conflict with implementation of the County of Santa Cruz Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020). Therefore, no impacts to an adopted emergency response plan or evacuation Plan would occur from project implementation.

2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

Discussion: The project is the development of a trail system and would not provide housing or facilities that would be occupied, and therefore there would be no exposure of occupants to pollutants. The trail system would be used by the public; however, daytime users of the parking area or trails would not be exposed to higher risks of fire than currently exist at the site. These recreational users would be present for a limited period of time during the day and would therefore be less susceptible

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

to loss or injury from fire. Regardless, several protections are incorporated into the project as described in the Detailed Project Description. The proposed parking area includes all required all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. Two 5,000-gallon water storage tanks filled from a water truck and a 4-inch wharf hydrant would be installed for fire protection. The fire hydrant would be located a minimum 50 feet and a maximum 150 feet from the restroom building. The water tanks would be mounted on an 8-inch prepared and compacted subgrade. The parking area would be designed and constructed to meet all emergency vehicle turning standards and clear signage would mark these locations. Cameras and a standard emergency call box would be installed and routinely monitored. Cameras would be installed at various locations and the emergency call box would be mounted on the restroom building. The single-speaker emergency call box would have a water tight enclosure and be vandal resistant.

The project site has historically been used for timber harvest and has an active Timber Harvest Plan (THP# 1-14-117 SCR) approved by CAL FIRE (2015). The proposed San Vicente Redwoods Public Access Plan includes integrating preservation, restoration, and sustainable timber harvesting with research, education, and recreation. Two areas of the project site were delineated as Preservation Reserves, totaling about 900 acres. These areas would be managed to preserve and maintain existing old forest and other rare plant communities. Three areas on the project site were delineated as Restoration Reserves, totaling about 4,000 acres. These areas would be managed to allow limited timber harvesting primarily for the restoration and enhancement of native ecosystem values. Two areas were delineated as Working Forest, totaling about 3,700 acres that are areas to be managed to emphasize Sustainable Forest Management. Public access would be permitted on approximately 460 acres of the site. Most of the property (approximately 94%) would be closed to public access.

The existing uses at the site involve some potential ignition sources (timber harvest equipment), which would continue under the project. The project would also introduce increased public access, which can increase ignition potential. Primary ignition sources related to public access include vehicles, open fire, and smoking. The project does not include camp sites or barbeque pits. Smoking would be prohibited. In addition, the proposed parking areas would be overlain with a pervious rock base that minimized ignition potential from vehicles. The only structures that would be introduced at the proposed parking area include the restroom building on a 15-foot by 15-foot pad, a temporary construction trailer, and two 5,000-gallon fire storage water tanks.

Although these structures would be proposed in close proximity to wildland where the risk of fire is high, they are not habitable structures and adequate fire protection services would be available. Because adequate fire protection services would be available to the project site, and no permanent residents would be added as part of this project, people and structure would not be exposed to a significant risk from wildland fire. Therefore, impacts would be less than significant.

In addition, the proposed San Vicente Redwoods Public Access Plan includes the following goals and policies that are required to manage risk and safety for users of the site:

Goal Access 2. Manage Risk and Safety.

> **Policy Access 2.1.** Provide patrol, monitoring, security, and signage for public safety and protection of resources.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Policy Access 2.2. Provide trail etiquette coaching to users and safety monitoring.

Policy Access 2.3. Work with partners to ensure adequate provision of emergency services.

Policy Access 2.4. Collect and maintain incident and accident reports and respond accordingly to reduce hazards.

Goal Access 4. Minimize the impact on the security, privacy, and rural character of the neighborhoods near the property, while achieving the other goals of the Plan.

Policy Access 4.2. Utilize signage and surveillance to minimize impacts to neighboring properties caused by trespassing or other activities.

In addition, the proposed San Vicente Redwoods Public Access Plan's adaptive management approach would further ensure the safety of users on the project site. A complete list of the adaptive management strategies is provided in the proposed San Vicente Redwoods Public Access Plan. However, the following specific strategies relate to wildland fires on the project site:

- Close the property on 'red flag' days of exceptionally high fire risk and maintain a network of fire-fighting water tanks
- Track unauthorized visitors on 'red flag day' fire hazard days; adjust patrol effort, engagement and enforcement and monitor and maintain tanks to ensure they are full and in good condition.

3. *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*	☐	☐	☒	☐

Discussion: New infrastructure that exacerbates fire risk is not proposed. New trails would be maintained, and the area would be operated as described in the San Vicente Redwoods Public Access Plan, and as described in T.2 above. Approximately 14 miles of shaded fuel breaks have been created on the property and would continue to be maintained. The trail network design is coordinated with these to facilitate maintenance. CAL FIRE is the emergency management partner, and would be involved in planning fire prevention, and emergency medical and fire response. A utility road for existing high-tension electric transmission lines (operated and maintained by PG&E) passes through the northern portion of the main tract (roughly parallel with Empire Grade). This utility line would continue to be maintained. Impacts would be less than significant.

4. *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*	☐	☐	☒	☐

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The project proposes re-use of existing roads for trails, the development of new trails, a 4.7-acre parking area, and the conservation/restoration of approximately 5,000 acres. The project includes Trail Design Guidelines, which are intended to facilitate the integrated design and construction of trails to avoid environmental impacts. New trails would conform to the natural terrain, minimize erosion and fall-line orientation, avoid the removal of trees larger than 12 inches in diameter at breast height (DBH) and damage to roots, and avoid active unstable and other hazardous areas, sensitive plant and animal habitats, archaeological resources, steep sideslopes, and unstable watercourse crossings. New trails would have a grade no steeper than half the grade of the native hillside and less than 15% except for sections shorter than 50 feet. New trails would avoid watercourse crossings where channel gradient is steep, as well as at deeply entrenched streams with potential unstable streamside slopes. Routes would generally be located such that drainage areas are crossed high in their watershed locations where streams are less defined in order to avoid stream disturbance.

The proposed San Vicente Redwoods Public Access Plan also includes construction protocols and maintenance guidelines that would ensure that all trail construction and maintenance would prevent erosion to the degree feasible. See further discussion under questions J.1 and J.3 for descriptions of erosion and run-off control. The limited development proposed, as well as the sensitivity to the existing landscape, will reduce instability, run-off, and landslides, and impacts will be less than significant.

U. MANDATORY FINDINGS OF SIGNIFICANCE

1. *Does 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal community or eliminate important examples of the major periods of California history or prehistory?*	☐	☒	☐	☐

Discussion: The potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory were considered in the response to each question in Section III (A through T) of this Initial Study.

Resources that have been evaluated as significant would be potentially impacted by the project, particularly biological resources, cultural resources, and tribal cultural resources. However, mitigation has been included that clearly reduces these effects to a level below significance. Mitigation measures BIO-1 through BIO-7 (discussed in section D above) and CUL-1 through CUL-4 (discussed in section

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

E above) were developed based on the presence of existing resources, site conditions observed in the field, and approved technical studies to adequately address any potential impacts from the project. In summary, these mitigations include: plant and wildlife surveys by qualitied biologists to ensure that no protected species would be negatively affected; measures to protect nesting birds; and mitigation to cease construction and contact the appropriate agencies if archaeological resources or human remains are found. As a result of this evaluation, there is no substantial evidence that, after mitigation, significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

2. *Does the project have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*	☐	☐	☒	☐

***Discussion*:** In addition to project specific impacts, this evaluation considered the projects potential for incremental effects that are cumulatively considerable. In the project vicinity there are a number of probable future projects, including a trail system at the Cotoni Coast Dairies property, the construction of the rail trail from Davenport to Santa Cruz, and the potential for future visitor serving uses at the former Cemex cement plant. This Initial Study considered the probable future recreational and visitor serving uses that may occur within the project vicinity in evaluating cumulatively considerable impacts in terms of overall visitation and traffic generation. The projected visitor counts (Attachment 10) and traffic analysis (Attachment 11) provided by the consultant include an increased level of visitation based on the future buildout of projects and recreational facilities in the area. Each of those separate probable future projects may have their own localized impacts and the majority of trail use on the main tract of the San Vicente Redwoods property will be limited to visitors who access the property through the trailhead off of Empire Grade (due to trail length and elevation gain). For this reason, the evaluation of potential impacts for the main tract was primarily focused on the trailhead and trail system located off of Empire Grade. Additionally, the construction of additional trail access points and trail systems elsewhere in the project vicinity would likely result in a reduced demand for trail usage on the main tract and reduce associated visitor traffic and parking volumes off Empire Grade and within the San Vicente Redwoods property.

As a result of this evaluation, there is no substantial evidence that there are significant cumulative effects associated with this project, even when factoring other probable future projects in the vicinity. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

3. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*	☐	☐	☐	☒

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

***Discussion*:** In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in section III, Environmental Review Checklist, sections A through R of this Initial Study. As noted above, mitigations have been included to address potential impacts to biological and archaeological impacts to reduce them to be less than significant. There were no impacts warranting mitigation for other issues which might cause substantial adverse effects on human beings. Traffic and noise were the most likely impacts to affect the adjacent neighbors. However, technical reports demonstrated that the impacts would be less than significant. As a result of this evaluation, there is no substantial evidence that, after mitigation, there are adverse effects to human beings associated with this project. Therefore, this project has been found not to meet this Mandatory Finding of Significance.

IV. REFERENCES USED IN THE COMPLETION OF THIS INITIAL STUDY

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V. ATTACHMENTS

1. Mitigation Monitoring and Reporting Program
2. Draft San Vicente Redwoods Public Access Plan, prepared by PlaceWorks, June 2018
3. Trails and Staging Area Plan
4. Air Quality/Greenhouse Gas Emissions Modeling Data, prepared by PlaceWorks, April 2018
5. Biological Resources Assessment, prepared by WRA, Inc., June 2018 & County of Santa Cruz acceptance letter dated July 16, 2018
6. Cultural Resources Study for the San Vicente Redwoods Public Access Plan Santa Cruz, Santa Cruz County, California, prepared by Tom Origer & Associates, October 2017 & County of Santa Cruz acceptance letter dated July 16, 2018 *(Note: The Cultural Resources Study includes confidential information regarding the locations of archaeological resources that is protected by law and is not available to the general public.)*
7. Geotechnical Investigation for San Vicente Redwoods Staging Area, prepared by Pacific Crest Engineering, Inc., January 2018
8. Drainage Analysis San Vicente Redwoods Staging Area, prepared by Fall Creek Engineering, Inc., August 2018
9. Noise Modeling Data, prepared by PlaceWorks, April 2018
10. Projected Visitor Counts and Parking Needs, prepared by PlaceWorks, January 2016
11. Traffic Impact Analysis, prepared by Mott MacDonald, September 2017

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